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STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933

Of The Journal of the American Institute of Real Estate Appraisers of the National Association of Real Estate Boards, published quarterly at Chicago, Illinois, for October 1, 1937.

State of Illinois } ss.
County of Cook }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Harry Grant Atkinson, who, having been duly sworn according to law, deposes and says that he is the Business Manager of The Journal of the American Institute of Real Estate Appraisers and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in Section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, American Institute of Real Estate Appraisers, 22 W. Monroe Street, Chicago, Ill.; Editor, K. Lee Hyder, 525 E. Michigan Street, Milwaukee, Wis.; Managing Editor, Harry Grant Atkinson, 22 W. Monroe Street, Chicago, Ill.; Business Manager, Harry Grant Atkinson, 22 W. Monroe Street, Chicago, Ill.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

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HARRY GRANT ATKINSON.

Sworn to and subscribed before me this 20th day of September, 1937.

MABEL L. DeYOUNG. (Notary Public)
(My commission expires August 26, 1941.)

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• With The Editors •

VALUATION UNDER THE "COMMON LAW"

EVERY pronouncement by the President ***makes the front page*** as a matter of course, but in a recent message to Congress he took "valuation" with him and in the process coined what appears to be a new basis of value—"common law." The trouble was he failed to define it exactly, and the sole result to date is to focus public interest upon an old and familiar controversy—the "rate base" in public utility regulation.

To the appraiser of real estate, the public utility problem is of no great significance at the moment, but any basic change in valuation principles as laid down by our courts in the past must sooner or later have an influence upon all matters concerning property value and its estimation. In any event, whether as an appraiser or as a user of public utility services and commodities, everyone is vitally interested in this queston in his capacity as a citizen.

We recently had occasion to interview a number of governmental officials in Washington who were connected with departments or agencies dealing in some manner with valuation problems, and in each instance we asked for an interpretation of the "common law" principle. While none would commit himself for publication, we were assured by all that it meant "prudent investment." This, of course, was a big help. It left us as much in the dark as before—but at least it brought us back to more familiar ground. Now "prudent investment," advanced as a proper base upon which to predicate rates and charges for public utility service, is in itself not clear unless qualified—and at its best is essentially ephemeral in character. From one viewpoint it may be taken to mean "that part of the actual money outlay of the past (original cost) that may be found to have been ***prudently*** invested." This interpretation would presumably eliminate all unnecessary or unwise expenditures but otherwise adopt "original cost at the time the property was first constructed or installed and devoted to public service" as a fair and proper ***rate base.***

An entirely different viewpoint is apparent if we consider the term to mean the investment that could and would be ***prudently*** made in taking over the property for continued operation as of the date upon which the rates are under consideration." In the one instance the concept is "cost"; in the other, "value"—and we are right back where we started.

The fact that a further inference was made in the President's message that "common sense" enters into the determination may throw a little more light on the matter, at least to the real estate appraiser who deals of necessity in ***common-sense valuations.*** His findings are not matters of governmental fiat nor legal pronouncement but rather are controlled by the desires, demands, and everyday dealings of the property owners and users. This means that ***current*** or ***present value*** is paramount. Original cost may be helpful to the solution of his problem, but certainly it is not a measure of ***value*** in itself—whether the monies were wisely expended or not.

And the United States Supreme Court has repeatedly held that "present value" must be given great weight in the determination of "fair value" for rate-making purposes. Since true value must in the final analysis rest primarily upon the ability to produce net income and income from public utility operation is dependent upon the level of rates and charges, it is obvious that we cannot base the rates upon the ***value*** in any true sense. Value is the end product in the formula. This leads to the conclusion that the Supreme Court has had in mind, in speaking of "present value," the concept of cost—***present cost***—which in the parlance of the appraiser means ***reproduction cost.*** At least it has heretofore appeared to lead to such a conclusion, which is entirely consistent with our interpretation of "prudent investment."

There is no longer any doubt but that the public is "appraisal conscious." By what-

ever name we may choose to term it, the appraisals of the future—whether of real estate, public utility, or any other type of property—must be sound and supportable, and their preparation will require the exercising of good ***common sense*** in interpreting and meeting the particular problem involved. Furthermore, by far the greater portion of the people believe in fair dealing and are willing to pay a reasonable price for services received—***but it must be reasonable.***

It is hoped that the publicity occasioned by the President's interest in this very important matter will bring about a better general understanding of the perplexing question. The appraiser has an important part to play in this endeavor. Certainly he would like to see the issue settled one way or the other.

* * *

AN ACKNOWLEDGMENT

WE are deeply indebted to Dr. Ernest M. Fisher, of the Federal Housing Administration, for a valuable contribution to our appraisal terminology. In a recent address he called attention to the passing of the term "horseback" appraisal. He stated that it is now wholly obsolete and urged the adoption of the modern term—"windshield" appraisal. While he did not infer that there has been any change in the form or the basis of the product itself, we cannot help but sense the great potentialities involved. Think how much faster the automobile is than the horse—and the roads are getting better all the time. With faster cars to come, to say nothing of fewer curves and rounder corners, it won't be long until even the address of the property can be eliminated. Won't that be something? Thanks, Doctor!

* * *

A CHALLENGE

THERE is great need in this country for a high-grade college of urban real estate.

Nobody knows exactly how much of the national wealth is in real estate, but we may safely assume from the information we have that more than one half of the capital of all our people is in this one form of wealth. The investment of one half of one's fortune in one specific form of wealth automatically exerts a controlling influence over the investment of the balance of that fortune in other forms of wealth. This is true of peoples and nations as well as of individual citizens. This is one reason why the welfare and the progress of society in general are so profoundly and quickly affected by the ups and downs of real property.

The importance of education with respect to farm lands has long been recognized in America. We have almost countless agricultural schools, ranging all the way from township agricultural high schools to internationally famous colleges of agriculture. We have state departments of agriculture, numerous heavily endowed farm experimental stations, and a powerful Federal Department of Agriculture.

All of this is splendid. But why do we ignore urban real estate? Less than one fourth of our people live on farms; the greater part of our savings is tied up in investments in urban real estate, including fees, leases, and mortgages; our most perplexing social, economic, and civic problems spring from urban land utilization and related questions; yet there is not one single school of "urbiculture" in the whole of this great nation—no place where one can go to learn about basic principles of urban land planning and utilization or to secure training in sound procedures of dealing with the vital problems that rise out of real estate.

This is all the more difficult to understand when we reflect that there are probably as many as one-quarter million persons in America who are working as real estate appraisers, brokers, salesmen, managers, mortgage men, builders, and in other special vocations related to real estate.

So, we say that there is great need today for a good school of urban real estate or a college of "urbiculture." It should be fine enough in quality to compare favorably with our great schools of business, medicine, agriculture, law, architecture, and engineering. It should offer thorough-going courses in land economics, city planning, valuation, taxation, management, finance, home building, brokerage, and other phases of urban real estate principles and practice. It should engage actively in related research. It should become a famous seat of knowledge that would provide education and training in this fundamentally important but little understood field.

THE NATIONAL APPRAISAL FORUM

THE efforts of the Joint Committee on Appraisal and Mortgage Analysis were brought to a culmination in the first National Appraisal Forum held in November at the Mayflower Hotel in Washington, D. C.

By whatever standards we attempt to weigh the results of this meeting, we at least came away with the keenest awareness of the tremendous interest in appraisals and appraising that holds the country today. Over 1,000 men and women drawn from every field, directly or indirectly concerned with urban and agricultural property appraising, were in attendance.

While the invitations offered nothing more than an open forum for discussion of the needs for and sources of ***appraisal data,*** the Committee actually had compiled for distribution an outstanding array of data sources and bibliography that undoubtedly represents one of the greatest contributions ever made to appraisal literature. The men who were responsible for this activity and those who performed the yeoman task of assembly and compilation are entitled to the thanks of every appraiser in America. Particularly, all M.A.I.s should be grateful to those who developed the volumes on urban property.

The addresses and discussions from the floor appeared to concentrate very largely on housing requirements and standards and more or less generalized appraisal data such as are reflected in population trends, neighborhood movements, "blighted" areas, encroachment problems, real estate consumption, and—to a lesser extent—construction costs and operating trends. Critical comments from certain of those in attendance appeared to centralize on the failure to discuss data of a more tangible nature that might be adaptable by the appraisers in their everyday vocation.

Such criticism, however, is believed to be attributable to the failure to understand the underlying reasons and purposes of the meeting or possibly to even a lack of vision upon the part of the commentators themselves. A calm and dispassionate consideration of national and world conditions today, if we may admit that such restraint in thinking is possible to any one of us, must lead to the conclusion that we are facing basic changes in our economic scheme that may well require a new survey of fundamentals. Appraisal data, as we have known them and used them in our work, are the result of given property relationships and human behavior of the past. We must of necessity go back to the underlying causes if we may hope to forecast successfully the relationships of the future—which, after all, is the appraiser's job.

We are once more in the position of the explorer and the pioneer. A recent and much discussed novel by an author of note presents a vivid picture of England's search, in the years just prior to the Revolutionary War, for the ***Northwest Passage***—the short route to the Orient that was believed to exist across the American continent. In this endeavor, extensive ***data*** were compiled at great cost, a large part of which was considered worthless simply because of the failure to discover the passage. However, in the process of learning where ***not*** to look for it, the work of those who followed was greatly simplified. As a matter of fact, the underlying ***data*** were compiled centuries earlier when the actual existence and trade potentialities of the Orient itself were discovered—or shall we go back still further to the time it was found that ships could be built to sail and men trained to navigate them over uncharted seas?

And so with apraising. The data assembly of the past need not be scrapped; it may be tremendously valuable and save unnecessary research whether or not directly applicable to our current and coming problems. If the appraiser, however, is to use intelligently these empirical statistics of past experience that we call ***data,*** then he must know the accompanying circumstances under which they were developed and thereby be enabled to estimate the probabilities under the changed conditions of the moment.

A resolution for the continuance of the Committee was passed unanimously with the stipulation that its activities be confined entirely to the assembly, analysis, and dissemination of data. These limitations appear to be desirable and should make for more effective results and perhaps for greater cooperative endeavor upon the part of private interests. There is no doubt but that this Committee has a definite and worth-while service to perform that should be of the greatest benefit to the appraisal profession and to the public as a whole. More power to it!

THE "HOW" IN THE HOUSING PROGRAM

THE revival of housing appears to hold the center of the stage at the moment in the play we are casting around national recovery. Is this just a rehearsal with a formerly most versatile actor brought out of retirement for a casual display of his histrionic talents, or are we going to really try to put on a performance?

Big figures are with us again. We learn from the Administration's housing authorities that there is now an estimated deficiency as great as 3,500,000 housing units. To make this up and provide for normal replacements, it is disclosed that 700,000 to 800,000 new units would be required annually over the next five years. At $4,000 per unit, this would represent an expenditure of about fifteen billions of dollars over the period, with the consequent direct increase and even a greater indirect increase in purchasing power.

Needed Federal legislation has been suggested by President Roosevelt to assist in "clearing the site and laying out the foundations." This was under consideration by the special session of Congress, and legislation of some kind will no doubt be passed at the regular session. Paul E. Stark, President of the National Association of Real Estate Boards, has aggressively sponsored such action throughout his administration. He very ably summed up the situation and the pending legislation at the recent Southeast Regional Convention of the National Association of Real Estate Boards at Jacksonville, Florida, and placed his stamp of approval on the program.

Now—admitting the accuracy of the figures and assuming that the laws to ease the financial burden to the small home owner are enacted—where do we go from there? Presumably, the Federal government will supply the "cues," and private capital is to take over the "production" from then on. The "script" is excellent, and the "lead" is certainly popular, but we are not so sure of some of the "character" parts.

To begin with, private capital is interested ordinarily in its ability to reproduce itself. Surely, even in periods of business recession when returns are doubtful, capital seeks safety, and holders are inclined to make sure they are going to get it back before they will enter aggressively into its investment. The only returns from housing are those accruing from rents, that is, if we set aside the amenities—and the people cannot afford to pay much for amenities these days. This means, in effect, that any sustained construction program will necessitate the bringing of rents and construction costs into balance once more. Obviously, the purpose of this program is to increase purchasing power by creating more jobs and more income. If rents are increased materially, we defeat the purpose; therefore, the only logical approach is to bring down construction costs. Unless and until this is done, we submit that the play will be pulled "off the boards" at the end of the first week.

Can constructions costs be reduced? They can—but it is going to mean a basic change in planning and resulting national psychology. ***Labor*** is the one player who can put it over. He has been acting right in character the past year or two but does not seem to fit the part in this play. All trends and statistics of construction costs are based upon materials prices and wages. In housing we have always viewed the "split" at from 40 to 60 per cent of each, depending upon locale and character of construction. We have generally failed to recognize two basic factors that are all-controlling: first, that the cost of labor represents a much larger percentage of the total than is reflected in the wages paid the building trades; and, secondly, that labor efficiency, that is, the amount of productive work done in a given unit of time, is most significant.

It is probable that the actual labor cost in an average dwelling unit is nearer 80 to 90 per cent than 40 to 60 per cent of the whole. Most building materials have a large proportion of labor absorbed in the cost as delivered at the job. Lumber, for example, is an important element in housing costs. The only basic materials cost in lumber is the "stumpage" in the tree. This may approximate at the most $5.00 to $6.00 per thousand board feet, whereas lumber at the site will be $30 to $35 or more and double that for finished millwork. In the case of brick, actual materials consist of the clay from which the brick is made, worth perhaps five to ten cents per ton in the deposit. Production, manufacturing costs, freight, handling, overhead, and profit make up the balance to the $15 or more per thousand brick on the job, and these added costs are very largely made up of labor. The same holds true in cement, aggregates, steel, tile, roofing materials.

heating and plumbing fixtures and fittings, and a hundred other items. Furthermore, these hidden labor costs in the materials of construction comprise a greater proportion of common labor than is true in actual construction work, and the wages of common labor have been and are being pressed steadily upward.

Labor rates are higher now than they were in 1929 and—worse than that—individual labor efficiency is at the lowest point in history. Labor is seething with internal strife, and there is no apparent hope for stability in either wage scales or performance. Paralleling this proposed housing drive, the Administration is again pressing for "minimum wage—maximum hour" legislation, another threat to or postponement of a dependable wage structure regardless of the merit or otherwise in the purpose of the legislation itself. There is no apparent accompanying demand for an ***honest*** day's work for a ***stable*** day's pay; no guarantee to the contracting employer that he can safely make commitments for the future and know that he can go through with them.

It is claimed that higher wages provide increased purchasing power and thus are a direct aid to recovery. This is true in a relative sense only and is at best a temporary influence. The wage paid is not significant over the long pull because price levels of commodities tend to adjust themselves automatically to a given wage level. The important thing right now is ***stability*** of wages which would restore confidence and a sense of security to private capital. This in turn must be accompanied by increased labor efficiency if this "housing" idea is to get us anywhere. It is the only possible way to bring returns into line with costs.

All in all, it does not look so good to private capital from the present vantage point. And yet the play might well be a real "hit" if ***labor*** would forget his usual part as the "heavy," learn the new "lines," and pull with the balance of the "cast." Perhaps a little concentrated coaching upon the part of the "director" might help.

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The Appraisal of Furnishings

By GARY YOUNG

THE appraisal of hotels and apartments involves many special problems other than the estimation of the market value of the real estate. Not the least of these perhaps is the independent appraisal of furnishings required from time to time by banks, insurance companies, bondholders' committees, hotel owners, receivers, courts, and others faced with the necessity of solving many business problems that involve estimates of value.

In approaching the appraisal of furnishings, considered independently from the property as a whole, the appraiser of competence and integrity faces at the outset the absolute necessity of a clear understanding of the basis of the appraisal dependent primarily, of course, upon the manner of its use and application to the problem involved.

The appraiser of furnishings is in reality a specialist who, based upon his particular knowledge and experience, is looked upon as an expert in his particular field. His work may and frequently is considered as corollary with that of the real estate appraiser, and he is guided by the same underlying principles. However, his estimates and opinions may involve findings of original or reproduction cost, use value under actual or assumed conditions, or value for sale on the open market, any one or all of which may be for utilization that has little if any relationship to the real estate itself. In preparing for and supporting his appraisal in court proceedings, the appraiser may be required to use and demonstrate his knowledge on such matters as:

A broad understanding of hotel operations and the place that the furnishings represent, both in the investment requirements and the conducting of the enterprise.

The details of furniture construction, standards of quality and workmanship, and past and contemplated changes in the art.

Fabrics and their use, quality and methods of manufacture and application in draperies, curtains, upholstery, and floor coverings, as well as the modes in interior furnishings and decoration.

Selling prices and discounts of manufacturers, quantity differentials and freight rates, and purchase and payment policies—all of these over a period of years.

Installation costs, labor rates and time standards, and crew methods and workroom charges for all classes of furnishings as well as for fixtures, such as refrigerators, stoves, kitchen cabinets, and similar items.

Hotel accounting methods as related to the budgeting and control of furniture, china, glass, silver, linen, and other equipment.

Service lives and expectancies under varying conditions of use, maintenance, and replacement standards and other factors bearing upon questions of depreciation.

Higher standards of competency and procedure have evolved over a period of years, but the greatest strides in these

respects may be directly attributable to the depression and the collapse of real estate securities brought about by over-financing during the nineteen-twenties. During this era we passed through the stages of receiverships, bondholders' committees, back to receiverships, and then to "77-B," the new section in the Federal Bankruptcy Act permitting reorganizations upon a more equitable and workable basis.

Prior to the break in real estate values and securities, the appraisal of furnishings, where called for by the courts, were assigned very largely to (1) the small retail furniture dealer and (2) the hotel contract salesman. Neither was equipped with the broad knowledge and experience required to meet the more complex problems that were arising. The former, with a limited background of small contract work in a local market, was unable to distinguish and properly classify "residential" furniture from that of "hotel construction." The latter, while probably better equipped with current standards and prices, was usually limited to factual data from individual factories and specialists rather than in the entire field covered by the varied lines of furniture and furnishings.

No one man, of course, can hope to attain all of the knowledge and skill required to appraise correctly all kinds and classes of furnishings in hotels and apartments. It is encouraging that the courts are now beginning to recognize this, and it is probable that the appraisals of the future will conform more and more closely to sound principles and proper practice.

To illustrate the various bases of value which the furnishings appraiser may be called upon to adopt in rendering his opinion under given circumstances, a typical hotel, built and furnished in 1928, has been adopted to meet the several requirements. Let us assume that opinions of value upon five different premises are desired as follows:

1. Resale to an outside purchaser for removal and disposal in the year 1933.
2. Resale upon the same basis in 1937.
3. Value to the hotel for continued use as installed in 1933.
4. Value upon the same basis in 1937.
5. Cost estimate for refurnishing the hotel in 1937 upon the basis of current costs and rentals.

The subject hotel has seventy-five one-, two-, two-and-one-half-, and three-room apartments. These were furnished in 1928 with carefully selected and conservatively styled furnishings, which harmonized with the scheme selected and with "hotel construction" and quality throughout.

The 1937 rent schedule, which is included to assist in establishing the type and quality of the building, is as follows:

1-room apartments—	$45- $65	per month.
2-room apartments—	$75-$100	per month.
2½-room apartments—	$100-$125	per month.
3-room apartments—	$110-$140	per month.

PRELIMINARY APPRAISAL PROCEDURE

Assuming he has obtained the necessary authority for access, inspection, and consultation with the management and its employees, the appraiser should first familiarize himself with the general room layout; the general quality of the furnishings; the present occupancies; and the broad plan of operation; personnel and inventory control; and policies of management.

His next step is to set up a "quality schedule" based upon his preliminary inspection of the class and character of furnishings, such schedule to be drawn to meet variations in grade, workmanship, and condition. This means, of course, a careful inspection of typical items prior to the taking of the actual inventory. The experienced furniture appraiser, when examining a dresser or a chest, will determine whether its construction includes full framing; he will determine the thickness and ply of its top, sides, and back; and with a penknife or thin screwdriver he will examine the joint construction. He should inspect each article and, if necessary, dismantle one article of each quality—tear off the bottom of a sofa or chair to examine its base construction, to check

tying, knots, and length of the spring, or perhaps cut through the burlap or muslin to inspect the filling.

THE INVENTORY

With the completion of the preliminary inspection and classification, the actual inventory is undertaken. The first step should be to procure a complete set of blueprints showing the room layout, which should be carefully checked against the building in order that any changes made subsequent to the preparation of the plans can be recognized. These plans should always be to a definite "scale" as they are used by the appraiser in checking his floor covering yardages in the rooms, corridors, and service areas.

In taking the inventory, the work should be systematized by providing listing sheets which will indicate all typical items in columnar form. The room numbers should then be entered and the condition, expressed as "A," "B," "C," etc., marked against each item in each room as the count and inspection are made. Each sheet should be dated and provision made for the signatures of the appraiser, his assistant, and the house representative who is assigned to identify ownership and make arrangements for entrance with the various tenants.

In this connection, the nature of the property and the purpose of the appraisal will determine to a large extent the proper cooperative arrangement with the management. In matters involving possible litigation, the appraiser may be required to certify as to the adequacy or accuracy of former inventories or to personal identification of assets coming under a former or new chattel mortgage. In such instances, he, in effect, accepts responsibility for the determination of actual ownership and, therefore, must exercise unusual care in accepting statements from the representative of the interested parties.

Especially in furnished apartment hotels, the tenants supplement and augment the standard furnishings of the house with articles of their own, and the accurate identification and segregation are naturally of great significance. Again, there is the possibility of "furniture shifting" from room to room or floor to floor during the taking of the inventory—in some instances with the intent to "pad" the list and the investment. To guard against the errors which would result under such circumstances, the appraiser must exercise the greatest tact and diplomacy. Where he is to accept such a definite responsibility, it is advisable to make a "spot" recheck of perhaps 5 per cent of the rooms done the previous day.

In actual practice, the best method is to do the work with one assistant who handles the sheets and posts the information as given to him. A check upon completion of each room as to the items entered as well as unmarked items for possible omission is customary and essential to accuracy.

PRICING THE INVENTORY

In pricing the inventory and thus arriving at the basis of valuation of the whole, the purpose and date of the appraisal will of course determine the procedure. In any event, the manufacturer's base cost, quantity discount and profit, and other factors of material and installation costs are foundational to the appraisal.

Furnishings purchased during the period 1927, 1928, and 1929 for the majority of hotels in the Middle West were financed upon a time basis. A typical case no doubt necessitated a 25 per cent cash payment at the time of signing the order with the balance in equal payments over a period of eighteen to thirty months; in many cases, however, the last payment was 25 per cent of the purchase price. When furnishings were financed in this way, the item of "dealer's profit" ranged from 33 1/3 per cent to 40 per cent.

As an example, we shall take a typical living room davenport included in a quantity purchase in the year 1928, which developed a quantity discount of 10 per cent and a profit of 15 per cent. The cost is estimated as follows:

Original 1928 manufacturer's selling price	$50.00
Less: Quantity discount of 10%	5.00
	$45.00
Plus: Freight (varies according to location)	1.15
	$46.15
Plus: Dealer's profit of 15% (upon basis of 33 1/3% cash with order, balance 90 days)	6.92
	$53.07
Plus: Installation (1% of selling price)	.53
Total cost to hotel in 1928	$53.60

With this as a base, we are in a position to make the appraisal of this item on the five premises previously tabulated for illustration.

The condition of the item, of course, will be a large factor in arriving at its actual value. All other things being equal, this will vary in accordance with its age and life expectancy. The approximate life of the cover, assuming typical usage, is estimated at eight years, and, if recovered, as is the usual policy, the total life may be estimated at eleven years.

APPRAISAL OF DAVENPORT

1. Resale to outside purchaser in 1933 (based upon the price by second-hand dealers for five-year old davenports of this type and quality)	$12.00
2. Resale to outside purchaser in 1937 (based upon the price by second-hand dealers for seven- to ten-year old davenports of this type and quality)	$ 8.00
3. Value for use to the hotel in 1933 (six elevenths of the 1928 cost)	$29.50
4. Value for use to the hotel in 1937:	
If recovered (two elevenths of 1928 cost)	$ 9.75
If not recovered but in condition to be recovered	$ 4.00
5. Cost estimate for replacement in 1937 (based upon a similar article in type, size, and construction but with modern lines):	
Manufacturer's selling price	$42.00
Less: Quantity discount of 10%	4.20
	$37.80
Plus: Freight (varies according to location)	1.15
	$38.95
Plus: Dealer's profit (10% usual in 1937)	3.90
	$42.85
Plus: Installation (1% of selling price)	.42
	$43.27

It is obvious from the above example that the appraiser must keep himself informed at all times as to the market conditions and prices for used furniture. Files should be maintained in which should be placed pertinent information to be used in guiding his judgment and substantiating his opinions. The used furniture dealers and agents operate, of course, in a competitive market which tends to stabilize prices, but the current offerings of a single dealer are not necessarily a proper standard for valuation.

The appraiser should retain all of his original notes and computations for the purpose of justifying his values to his client or of proving them in court in formal testimony. It is usually advisable to render the report itself in a form that will eliminate all possible detail. This makes for clarity in interpretation and frequently saves nonessential cross-examination. In actual testimony, details are rarely requested except for such important items as davenports, easy chairs, dressers, and carpets.

WHAT ARE "FIXTURES"?

The laws and regulations set up by different states as well as the rulings of the courts show considerable variation in the line of demarcation as between real estate and personal property. Furthermore, there may be a different classification recognized in the relationship and interests of landlord and tenant and that involved under mortgage and finance, condemnation, etc. The purpose of the appraisal and the instructions under which the appraiser performs his service may be a sufficient guide in some instances, and in others

he may be called upon to exercise his own judgment in including or excluding such items as kitchen cabinets, built-in refrigerators, curtain fixtures, linoleum and carpet linings cemented to the floor, and "in-a-dor" beds. Usually, an item may be considered as a "fixture" and hence excluded from the furnishings inventory if it is so attached to the building as to cause material damage to itself or the building upon removal. In some instances, the mere screwing of an item to the floor or wall may be interpreted as placing it in the category of "fixtures" irrespective of its use or ownership. The appraiser should always be prepared to state *where* and *why* he "drew the line," and his notes should be prepared in a sufficiently flexible form for ready correction if the necessity arises.

FLOOR COVERINGS

Floor coverings for a furnished apartment building or a hotel ordinarily amount to from one third to one fourth of the total cost of the original furnishings and, therefore, are an important item in any appraisal of this nature.

In appraising the floor coverings, the appraiser should cut off a sample of each typical pattern of carpet, rug, and linoleum, place it under a magnifying glass, and take the count of wire and tuft. Where practicable, a length should be taken up from the floor and examined for a name-woven brand; many of the better quality carpets carry the manufacturer's brand interwoven on the back. With this identification, the appraiser, with the information at his command, should be able to establish the original cost of the carpet during any year. If the carpet is not a name-woven brand, the count of the sample should be taken and compared with that of samples from any one of the four or five leading manufacturers of similar floor coverings. Such an analysis will come very close to a correct evaluation of the carpet. In arriving at the cost in this way, do not be misled by the "heather" qualities. Most heathers are manufactured from yarns of all colors left from all weavings. They can be of good or poor quality, depending entirely upon the qualities of the yarn, and it is very difficult to establish the value in either case.

Special care should be taken in checking the yardage of each apartment and corridor. It is common knowledge that one of the easiest ways for a contractor to increase his profit on carpeting is to "pad the yardage," and, unfortunately, it is very difficult to discover such practice, due to waste and pattern matching.

In valuing the floor covering in individual rooms or corridors, the appraiser should consider the possibility of taking up the carpet and replacing the worn strip at the door, or perhaps at the elevator or in front of a dresser, with good parts from another apartment or corridor. (Corridors as a rule have better quality carpets than the typical room.) Where carpets are in a fair condition, the exact amount necessary to replace the worn portions should be measured, making allowance for cutting and pattern matching. The appraiser should accept no yardage measurements except those that he personally makes or checks.

In arriving at the unit cost of the floor covering, the appraiser should also consider "lining" and "cutting, making, and laying" costs. In checking the lining, particular note of the type used—whether paper, jute, or hair—should be made. The "cutting, making, and laying" charge will depend upon the location, labor conditions, and whether the carpet is machine or hand sewed. These charges are always combined into one figure and recorded as "C. M. and Lay . . . . . 22 cents per yard."

After establishing the correct cost per yard, "made, laid, and lined," the estimated depreciation of the carpet should be deducted. It is well to remember that good lining can be reused. If it is a good grade of hair lining, 10 per cent would be a fair average depreciation; if a good quality jute lining, 25 per cent; and if paper lining, 50 per cent after five or six years' use.

Floor coverings, of course, include linoleum. This, however, is a very simple item to evaluate as it seldom pays to replace part of any unit. An allowance should be made for laying as this has an important bearing upon the life of the linoleum. If it is tacked to the floor, it will soon buckle and break, whereas good linoleum, properly cemented, will last for years. Here again an appraiser should use no measurements nor costs except his own.

THE EXPECTED LIFE OF HOTEL FURNISHINGS

The appraiser of hotel furnishings must be able to make reasonable estimates of the expected life of the various articles of different qualities under variable conditions of use and service requirements in order to arrive at proper estimates of value. Here is where the competence and judgment of the appraiser are of the greatest significance. Life expectancy tables and schedules based upon factual information are available but should be used with the greatest care to give effect to the variations of quality, usage, and adaptability.

The following schedule shows the approximate life of furnishings in a good grade hotel, where the merchandise selected was manufactured to conform to the specifications of "hotel construction." This replacement schedule applies only to certain types of furnishings and, without adjustment, is not applicable to the average quality of furnishings installed in the majority of inexpensive apartment hotels in 1927, 1928, and 1929.

Upholstered davenports, easy chairs, open armchairs, based upon recovering once	11 years
Case goods (beds, dressers, secretaries, etc.) will last longer than upholstered furniture but will be outmoded at the end of	14 years
Dinette furniture (tables and chairs), based upon refinishing the top twice	10 years
Occasional furniture (end tables, etc.), based upon refinishing twice	9 years
Draperies, if mohair	6 years
Draperies, if cotton damask	3½ years
Curtains	2 years
China	2 years
Silver (loss and theft considered)	2½ years
Glass	1 year
Kitchen utensils, if rebuffed	2½ years
Pictures	6 years
Lamps (breakage considered)	5 years
Linens (theft and wear considered)	2½ years
Typical room carpet, if recut and relaid and of medium quality	10 years
Corridor carpets, Saxony	18 years
Good, high pile Axminster corridor carpets	9 years

VALUATION SCHEDULE

In accordance with the principles and methods as discussed herein, a valuation schedule (pages 18, 19, and 20) has been prepared showing the setup for the appraisal of the complete line of furnishings in the building adopted for illustration. The various items and their condition and quantity constitute the furnishings inventory, and the values assigned upon each of the five premises are shown in units and totals for the number of each item in the list. The totals at the bottom of each column are the sums of the individual item values. Unless there are other considerations involved, these totals constitute the values that would be set forth in the appraisal report.

PRACTICAL SUGGESTIONS FOR THE APPRAISER

Matters bearing upon the basis of the appraisal and the conditions arising in its preparation that may have an influence upon its use and utility should be included in the report or in explanatory statements accompanying the same. For example, the report might contain qualifying or informatory remarks of which the following are typical:

1. "Some apartments in this building have carpets of one quality in one room and carpets of another quality in other rooms. We have, therefore, given you a total condensed figure of the total yardage of *each* grade of carpet in all apartments."
2. "This appraisal does not take into consideration the necessity, or lack of necessity, of any article, nor does it include lighting fixtures or machinery of any kind."

3. "We recognize the possibility of inaccuracies and the wrong identification of items—such as odd pieces of furniture, china, glass, silverware, etc.—entering into the taking of any inventory of this size. We suggest, therefore, that a contingency allowance of $..... be made, to be added (or subtracted) from the total value found in this appraisal."
4. "The physical condition of the interior of this hotel—corridors, apartments, and public rooms—shows careful and systematic care and maintenance, especially considering the recent reduction in maid service."
5. "Your attention is called to the fact that this appraisal, being based upon today's market values, is subject to fluctuation for the prices of all merchandise included in this appraisal are advancing (or falling). If the market continues to advance (or fall) in the next three months as it has advanced (or fallen) during the last two months, the merchandise in this building will be worth considerably more (or less) than it is today."

In order to show the total quantity of each item in its proper quality classification, the appraiser's notes should include a condensed table showing all typical rooms. All special rooms—such as the lobby, lounge, elevator lobby, main dining room, private dining rooms by name or number, ballroom, entrance, vault, private offices, general offices, terrace and garden, store rooms by number, etc.—should be shown under their own heading, and every article in each room should be itemized under the appropriate headings.

In states having a used-bedding law, prohibiting the resale of box springs, mattresses, and pillows, the appraiser, in his report, should mark such items "N.V." (no value) and should make an appropriate explanation in his notes. This law is constantly violated; however, the appraiser could cover this point by calling attention to the fact that, in offering such items for sale, the sales value could be increased perhaps by offering a box spring, a mattress, and one pair of pillows free with the purchase of a fourth item and that the four items together should bring a certain sum.

In conclusion, constant effort toward accuracy and proper checking throughout all phases of the work cannot be too greatly emphasized. Some of the points previously discussed and others worthy of particular consideration are tabulated in the following:

1. In confidential or responsible engagements, the appraiser should not let any interested party know his schedule of appraising rooms. This precaution is necessary to eliminate the danger of furniture being shifted by interested parties when the appraiser is absent.
2. No one other than the appraiser's employees should have access to inventory and quality sheets. It is a very simple procedure to change the quality ratings.
3. Too much faith cannot be placed in labels as they are too easy to change. The fallacy of trusting wholly in labels is well illustrated in the case of a hotel which advertised its rooms as being supplied with Simmons Beautyrest Mattresses. Only twelve genuine Simmons Beautyrest Mattresses were found in the entire hotel; the others were cotton felt and cheap innerspring mattresses. The Simmons Beautyrest labels, however, had been sewed on all mattresses at the request of the hotel owner.
4. Silver, china, and linen stock rooms should be checked twice. Some owners, when they know that it is planned to appraise the linen stock rooms, give the maids only 50 per cent of the normal linen supply for their floors in an effort to increase the linen count in the stock rooms. Likewise, in appraising some floors, it might be found that each apartment has six bath, six face, and four dish towels, whereas the normal supply is three bath, three face, and two dish towels. The appraiser should check with the maids for this information. He should take the total of the daily laundry lists for one month and divide by thirty; in this way it is possible for him to arrive at the average quantity of linen in the laundry. This amount added to the linen stock room count, plus the average room count, will give the linen totals. This also applies to blankets and bedspreads.
5. The appraiser should never be influenced by "Paid" bills—they are too dangerous to follow. This is well illustrated in the case of a certain apartment hotel in Chicago, where bills dated and stamped indicated that they were paid in 1928. Upon investigation it was found that there was never a furniture company of the reported name in Chicago and that the invoices had been

(Continued on page 21)

VALUATION SCHEDULE

ITEM	CONDITION	QUANTITY	RESALE—1933		RESALE—1937		VALUE IN BUILDING—1933		VALUE IN BUILDING—1937		COST TO REFURNISH—1937	
			UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
Davenports	A	4	$18.00	$ 72.00	$12.00	$ 48.00	$40.00	$160.00	$26.00	$104.00	$60.00	$ 240.00
Davenports	B	5	15.00	75.00	10.00	50.00	35.00	175.00	22.00	110.00	60.00	300.00
Davenports	B	10	15.00	150.00	10.00	100.00	35.00	350.00	22.00	220.00	43.00	430.00
Davenports	C	30	12.00	360.00	8.00	240.00	26.00	780.00	18.00	540.00	43.00	1,290.00
Davenports	D	20	10.00	200.00	5.00	100.00	20.00	400.00	10.00	200.00	43.00	860.00
Davenports	E	6	10.00	60.00	2.00	12.00	20.00	120.00	N.V.	.....	43.00	258.00
Wing chairs	B	4	12.00	48.00	8.00	32.00	30.00	120.00	20.00	80.00	38.00	152.00
Wing chairs	C	10	10.00	100.00	5.00	50.00	25.00	250.00	12.00	120.00	38.00	380.00
Wing chairs	D	6	8.00	48.00	3.00	18.00	20.00	120.00	10.00	60.00	38.00	228.00
Large easy chairs	B	5	12.00	60.00	8.00	40.00	26.00	130.00	15.00	75.00	26.00	130.00
Large easy chairs	C	10	10.00	100.00	5.00	50.00	20.00	200.00	12.00	120.00	26.00	260.00
Large easy chairs	D	31	8.00	248.00	3.50	108.50	18.00	558.00	10.00	310.00	26.00	806.00
Large easy chairs	E	9	5.00	45.00	2.50	22.50	10.00	90.00	2.50	22.52	26.00	234.00
Cogswell chairs	C	4	10.00	40.00	4.00	16.00	22.00	88.00	12.00	48.00	20.00	80.00
Cogswell chairs	D	12	7.50	90.00	3.00	36.00	15.00	180.00	10.00	120.00	20.00	240.00
Cogswell chairs	E	4	5.00	20.00	2.50	10.00	10.00	40.00	2.50	10.00	20.00	80.00
Open armchairs	A	4	5.00	20.00	3.00	12.00	20.00	80.00	15.00	60.00	18.00	72.00
Open armchairs	B	6	4.00	24.00	2.00	12.00	15.00	90.00	11.00	66.00	18.00	108.00
Open armchairs	B	5	5.00	25.00	3.00	15.00	12.00	60.00	8.00	40.00	12.00	60.00
Open armchairs	C	16	4.00	64.00	2.50	40.00	10.00	160.00	6.00	96.00	12.00	192.00
Open armchairs	D	42	3.00	126.00	1.00	42.00	9.00	378.00	5.00	210.00	12.00	504.00
Open armchairs	E	12	2.50	30.00	N.V.	.....	7.50	90.00	2.00	24.00	12.00	144.00
Secretaries	A	10	20.00	200.00	10.00	100.00	40.00	400.00	20.00	200.00	40.00	400.00
Secretaries	B	15	15.00	225.00	7.50	112.50	35.00	525.00	15.00	225.00	40.00	600.00
Secretaries	B	10	12.00	120.00	8.00	80.00	24.00	240.00	20.00	200.00	28.00	280.00
Secretaries	C	15	10.00	150.00	5.00	75.00	20.00	300.00	15.00	225.00	28.00	420.00
Desks	B	3	8.00	24.00	5.00	15.00	15.00	45.00	12.00	36.00	18.00	54.00
Desks	C	7	5.00	35.00	4.00	28.00	12.00	84.00	10.00	70.00	18.00	126.00
Desks	B	5	5.00	25.00	3.00	15.00	10.00	50.00	8.00	40.00	12.00	60.00
Desks	C	10	4.00	40.00	2.00	20.00	8.00	80.00	6.00	60.00	12.00	120.00
Accessory tables	B	15	5.00	75.00	2.50	37.50	10.00	150.00	7.50	112.50	12.00	180.00
Accessory tables	C	60	4.00	240.00	1.00	60.00	9.00	540.00	5.00	300.00	12.00	720.00
End tables	C	18	2.00	36.00	.75	13.50	4.00	72.00	2.00	36.00	4.00	72.00
End tables	D	20	1.50	30.00	.50	10.00	3.50	70.00	1.00	20.00	4.00	80.00
End tables	E	47	1.00	47.00	.25	11.75	3.00	141.00	.75	35.25	4.00	188.00
Coffee tables	C	10	3.00	30.00	1.00	10.00	6.50	65.00	5.00	50.00	6.00	60.00
Coffee tables	D	15	2.00	30.00	.50	7.50	5.00	75.00	3.00	45.00	6.00	90.00
Pier cases		10	5.00	50.00	2.50	25.00	12.00	120.00	10.00	100.00	12.00	120.00
Book cases		15	6.00	90.00	2.50	37.50	14.00	210.00	11.00	165.00	15.00	225.00
Floor lamps		75	3.50	262.50	.50	37.50	7.00	525.00	1.50	112.50	8.00	600.00
Bridge lamps		25	3.00	75.00	.50	12.50	7.00	175.00	1.00	25.00	7.50	187.50
Large table lamps		15	3.00	45.00	.50	7.50	6.00	90.00	1.50	22.50	7.00	105.00
Small table lamps		60	1.50	90.00	N.V.	.....	5.00	300.00	.75	45.00	5.50	330.00
Desk lamps		25	1.50	37.50	N.V.	.....	3.00	75.00	.50	12.50	3.50	87.50

VALUATION SCHEDULE

ITEM	CONDITION	QUANTITY	RESALE—1933		RESALE—1937		VALUE IN BUILDING—1933		VALUE IN BUILDING—1937		COST TO REFURNISH—1937	
			UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
Smokers (table)		75	$ .05	$ 3.75	$ .05	$ 3.75	$ .20	$ 15.00	$ .20	$ 15.00	$ .20	$ 15.00
Smokers (floor)		75	.30	22.50	.25	18.75	1.00	75.00	.75	56.25	1.50	112.50
Wastebaskets		125	.05	6.25	N.V.	.....	.20	25.00	.10	12.50	.35	43.75
Pictures		150	.20	30.00	.10	15.00	1.50	225.00	1.00	150.00	1.50	225.00
Pictures		40	.10	4.00	.05	2.00	.60	24.00	.25	10.00	.75	30.00
Ferneries (metal)		20	.75	15.00	.25	5.00	3.00	60.00	1.50	30.00	3.50	70.00
Living room draperies		25	1.00	25.00	N.V.	.....	5.00	125.00	1.00	25.00	10.50	262.50
Cornices		60	1.00	60.00	N.V.	.....	4.00	240.00	1.00	60.00	7.50	450.00
Curtains (prs.)		90	.10	9.00	N.V.	.....	.50	45.00	N.V.	.....	2.75	247.50
Dinnette tables		8	8.00	64.00	5.00	40.00	15.00	120.00	12.00	96.00	16.00	128.00
Dinnette tables		12	5.00	60.00	4.00	48.00	11.00	132.00	8.00	96.00	9.50	114.00
Dinnette chairs		32	3.00	96.00	1.50	48.00	6.00	192.00	4.00	128.00	6.50	208.00
Dinnette chairs		48	2.00	96.00	.75	36.00	5.00	240.00	2.50	120.00	4.25	204.00
Buffets		8	10.00	80.00	5.00	40.00	20.00	160.00	15.00	120.00	22.00	176.00
Servers		12	5.00	60.00	2.50	30.00	10.00	120.00	8.00	96.00	10.00	120.00
Beds (3/3)		14	10.00	140.00	6.50	91.00	20.00	280.00	16.00	224.00	20.00	280.00
Beds (4/6)		1	10.00	10.00	6.50	6.50	20.00	20.00	16.00	16.00	20.00	20.00
Dressers and mirrors		6	15.00	90.00	10.00	60.00	35.00	210.00	25.00	150.00	36.00	216.00
Chests		8	9.00	72.00	5.00	40.00	20.00	160.00	15.00	120.00	24.00	192.00
Night tables		8	4.00	32.00	2.50	20.00	9.00	72.00	7.50	60.00	10.50	84.00
Vanity dressers		2	12.00	24.00	5.00	10.00	35.00	70.00	25.00	50.00	38.00	76.00
Side chairs		8	2.50	20.00	1.00	8.00	7.00	56.00	5.00	40.00	8.50	68.00
Benches		2	2.00	4.00	1.00	2.00	5.00	10.00	4.00	8.00	5.50	11.00
Beds (4/6)		12	8.00	96.00	5.00	60.00	16.00	192.00	10.00	120.00	16.00	192.00
Dresser and mirrors		12	8.00	96.00	5.00	60.00	26.00	312.00	18.00	216.00	28.00	336.00
Chests		12	10.00	120.00	5.00	60.00	18.00	216.00	11.00	132.00	21.00	252.00
Side chairs		12	2.50	30.00	1.00	12.00	5.50	66.00	4.00	48.00	5.50	66.00
Night tables		12	3.00	36.00	1.00	12.00	6.00	72.00	5.00	60.00	5.00	60.00
Bedroom easy chairs		20	6.00	120.00	4.00	80.00	13.00	260.00	8.00	160.00	14.00	280.00
Box springs		27	N.V.	.....	N.V.	.....	13.00	351.00	8.00	216.00	16.00	432.00
Inner spring mattresses		101	N.V.	.....	N.V.	.....	12.00	1,212.00	6.00	606.00	16.00	1,616.00
Cotton-filled mattresses		22	N.V.	.....	N.V.	.....	5.00	110.00	2.50	55.00	8.00	176.00
In-a-dor beds		60	10.00	600.00	10.00	600.00	28.00	1,680.00	24.00	1,440.00	35.00	2,100.00
Rollaway beds		15	10.00	150.00	10.00	150.00	28.00	420.00	24.00	360.00	34.00	510.00
Pillows (prs.)		110	N.V.	.....	N.V.	.....	2.50	275.00	1.75	192.50	3.50	385.00
Bedroom draperies (prs.)		25	2.00	50.00	N.V.	.....	4.00	100.00	1.00	25.00	7.50	187.50
Bathroom curtains (prs.)		75	N.V.	.....	N.V.	.....	.75	56.25	N.V.	.....	2.00	150.00
Shower curtains		75	N.V.	.....	N.V.	.....	1.00	75.00	.50	37.50	2.25	168.75
Kitchen tables		45	1.50	67.50	1.00	45.00	3.00	135.00	2.00	90.00	3.50	157.50
Wastebaskets		45	N.V.	.....	N.V.	.....	.15	6.75	N.V.	.....	.35	15.75
Ladderback chairs		45	.25	11.25	.20	9.00	1.50	67.50	.75	33.75	1.75	78.75
Kitchen curtains (prs.)		45	N.V.	.....	N.V.	.....	.20	9.00	N.V.	.....	1.50	67.50
China (service—6)		25 sets	.50	12.50	.50	12.50	2.05	51.25	2.00	50.00	4.15	103.75
China (service—4)		50 sets	.65	32.50	.60	30.00	3.00	150.00	2.80	140.00	3.40	170.00

VALUATION SCHEDULE

ITEM	CONDITION	QUANTITY	RESALE—1933		RESALE—1937		VALUE IN BUILDING—1933		VALUE IN BUILDING—1937		COST TO RE-FURNISH—1937	
			UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
Silver (service—6)		25 sets	$ 1.35	$ 33.75	$1.25	$ 31.25	$ 2.25	$ 56.25	$ 2.15	$ 53.75	$ 5.10	$ 127.50
Silver (service—4)		50 sets	.90	45.00	.80	40.00	1.60	80.00	1.50	75.00	4.20	210.00
Glasses (service—6)		25 sets	.30	7.50	.30	7.50	.80	20.00	.75	18.75	1.05	26.25
Glasses (service—4)		50 sets	.25	12.50	.25	12.50	.60	30.00	.55	27.50	.90	45.00
Kitchenette utensils		75 sets	1.00	75.00	.75	56.25	4.00	300.00	3.75	281.25	7.50	562.50
Bath mats		9½ dz.	.25	2.38	.25	2.38	1.00	9.50	1.15	10.93	6.00	57.00
Mattress pads		123	.75	92.25	.25	30.75	2.00	246.00	1.50	184.50	2.50	307.50
Sheets		30½ dz.	2.40	73.20	2.50	76.20	9.00	274.50	10.00	305.00	16.00	488.00
Cases		28 dz.	1.20	33.60	1.20	33.60	2.50	70.00	2.60	72.80	4.75	133.00
Towels (bath)		55 dz.	.60	33.00	.60	33.00	1.75	96.25	1.85	101.75	3.90	214.50
Towels (face)		75 dz.	.25	18.75	.25	18.75	.60	45.00	.75	56.25	1.85	138.75
Towels (dish)		21 dz.	.10	2.10	.10	2.10	.30	6.30	.30	6.30	.90	18.90
Tablecloths		18¾ dz.	1.00	18.75	1.00	18.75	3.00	56.25	3.30	61.88	14.50	271.87
Napkins		84 dz.	.30	25.20	.30	25.20	.90	75.60	.95	79.80	3.00	252.00
Blankets (double)		123	1.00	123.00	1.00	123.00	2.75	338.25	3.00	369.00	4.50	553.50
Blankets (single)		123	.75	92.25	.75	92.25	1.90	233.70	2.00	246.00	2.50	307.50
Ironing board covers		75 dz.	N.V.	.....	N.V.	.....	.15	11.25	.15	11.25	3.00	225.00
Spreads (white)		15½ dz.	2.25	34.88	2.25	34.88	8.60	125.55	8.75	135.63	18.00	279.00
Spreads (colored)		25	.50	12.50	.50	12.50	2.00	50.00	2.25	56.25	3.00	75.00
Dresser scarfs		4½ dz.	.25	1.13	.25	1.13	1.20	5.40	1.25	5.63	2.50	11.25
Table pads		6 dz.	1.00	6.00	1.00	6.00	2.50	15.00	2.60	15.60	9.00	54.00
Sand jars		12	.75	9.00	.75	9.00	3.00	36.00	3.00	36.00	3.50	42.00
Rubber mats (12")		1 dz.	N.V.	.....	N.V.	.....	.15	.15	.15	.15	1.85	1.85
Wrought iron mirrors		6	1.00	6.00	.50	3.00	3.75	22.50	2.50	15.00	4.50	27.00
Carpet sweepers		75	.50	37.50	.10	7.50	1.50	112.50	.50	37.50	3.85	288.75
TOTAL—				7,202.49		4,101.74		19,759.70		12,700.74		27,728.37
CARPETS—(M. L. & L.)												
Wilton	B	355 yd.	1.00	355.00	.50	177.50	2.60	923.00	1.70	603.50	3.55	1,260.25
Wilton	C	545 yd.	1.00	545.00	.30	163.50	2.05	1,117.25	1.00	545.00	3.55	1,934.75
Velvet	B	140 yd.	.50	70.00	.20	28.00	1.75	245.00	.80	112.00	2.20	308.00
Velvet	C	360 yd.	.25	90.00	.10	36.00	1.00	360.00	.50	180.00	2.20	792.00
Velvet	D	480 yd.	.25	120.00	.08	38.40	.75	360.00	.40	192.00	2.20	1,056.00
Axminster	C	490 yd.	.35	171.50	.15	73.50	1.15	563.50	.70	343.00	2.40	1,176.00
Axminster	D	1200 yd.	.25	300.00	.08	96.00	.90	1,080.00	.55	660.00	2.40	2,880.00
Axminster	E	510 yd.	.10	51.00	.08	40.80	.50	255.00	.25	127.50	2.40	1,224.00
Rugs Axminster (9'x12')	C	6	12.00	72.00	5.00	30.00	36.00	216.00	14.00	84.00	48.00	288.00
Rugs Ax. (8'3"x10'6")	C	14	10.00	140.00	4.50	63.00	31.00	434.00	10.00	140.00	42.00	588.00
Rugs Axminster (3'x5')	C	32	1.00	32.00	.50	16.00	2.50	80.00	1.50	48.00	4.00	128.00
Carpet (Axminster)	C	410 yd.	1.00	410.00	.50	205.00	2.50	1,025.00	1.70	697.00	3.75	1,537.50
TOTAL—				2,356.50		967.70		6,658.75		3,732.00		13,172.50
GRAND TOTAL—				9,558.99		5,069.44		26,418.45		16,432.74		40,900.87

printed in 1936 by a job printer in the neighborhood whose total order was 100 billheads. In another instance, it was found that the merchandise had been purchased through a distant relative of the owner. An agreement had been drawn up with this relative, wherein he agreed to supply the hotel owner with a separate set of bills showing a 50 per cent increase in price.

6. The appraiser should never go through a room unless accompanied by one of his own men and preferably also by a representative of the building. This will not only avoid suspicion of theft, but it will prevent the making of false testimony relative to statements the representative is said to have made.

7. Whenever possible, the appraiser should refrain from giving in detail in the report the basis of evaluation of davenports, dressers, room carpets, draperies, etc. This information is for the appraiser's records only and may be best used as supporting information.

8. Ordinarily, the report should not include mechanical equipment or any equipment attached to the building.

9. The appraiser should not include in his report any item that he is not fully convinced is just and correct to include. If in doubt about any item, it should be included in his list of items "not appraised."

10. The appraiser should not take anyone's word on carpet yardage, but, as previously explained, he should measure this himself or should calculate it from *checked* blueprints.

CONCLUSION

The work of the furnishings appraiser constitutes an important field that is related to, but largely independent from, that of the real estate appraiser. His appraisal is usually desired to serve a particular purpose, and his findings are very frequently presented in matters of legal significance if not of actual litigation. He must accordingly so conduct his investigation at all times with the thought in mind that his results are going to be subject to question and substantiation.

The successful appraiser must have the knowledge and experience necessary to this field; he must approach each engagement with a clear understanding of the purpose limitations and personal responsibilities to be assumed; he must organize his procedure in a systematic manner; he must be consistently methodical in the detailed observations required in the inspection; he must keep abreast of the prices and market conditions; and, above all, he must be able to bring to the task *tact* and *diplomacy* so essential to cooperative effort and relations with others.

The Economics of Obsolescence and Inutility

By FRANK W. JACKSON

THE subject of the economics of obsolescence and inutility of industrial property is most inclusive, and volumes have been written on subjects of less importance than indicated by the many ramifications in the development of thought covered by this one.

We in the appraisal profession have continually before us the problems incident to the valuation of properties involving many factors and varying degrees of obsolescence and inutility. Among these are two separate and very distinct financial problems which must be considered in the management or sale of either commercial or industrial properties.

The first problem is constantly before the owners and users of such properties. It involves the principles and bases which should be used to create the necessary depreciation reserves to protect the value of the properties and to state correctly the earnings from the use of the properties after a proper provision out of the gross earnings for the loss in value constantly occurring as the result of wear and tear, obsolescence, and lack of utility. The problem of the owner involves the anticipation of the various factors which are going to affect the value of the properties in the future so that when and as the time comes for their disposal, there will be adequate reserves to permit the continuance of the business without incurring an unforeseen loss. This problem requires keen prophecy of the future. Many companies, for one reason or another, have failed to anticipate properly the required reserves and have fallen by the wayside, and their properties have been placed on the forced sale market.

The second problem and the one in which we are primarily interested here can be more accurately analyzed and therefore more easily measured. This problem considers the condition and obsolescence of the property at a given time when it is placed in the broker's hands for disposal, and the utility of the property can be considered in the light of the requirements of each potential purchaser. I do not mean by this to imply that the sale of an industrial property or the fixing of a sale price of such a property is an easy problem. The market is most limited, and, in many cases, the financial condition of the owner tends to place the sale upon a forced basis, with resultant low prices. The competitive methods of disposal all tend to subnormal prices, and, worst of all, the potential purchaser is aware of these facts and looks for the acquisition of industrial property at a sufficiently low price to give him a distinct advantage rather than at a price that is fair and reasonable considering the property and its potential utility to him.

INFORMATION NECESSARY FOR MEASURING OBSOLESCENCE AND INUTILITY

Returning to my earlier statement that the problem of measuring obsolescence and inutility of industrial properties for their sale lends itself to analysis, let us consider the information necessary for such a fact-finding determination.

The type of information which might ultimately be desirable could reasonably include any or all of the following concepts of value, which have been accepted by appraisers all over the country, as evidenced by their basic standards of appraisal practice and procedure. These include:

Continuation of normal use, assuming competent management and a profitable going concern.

Use in connection with a proposed conversion to meet conditions other than those existing at the date of appraisal.

A special use which might create a higher utility or value.

Use under conditions that would lessen present or former utility and result in diminished value.

Total or partial liquidation under forced

sale requiring the placing on the market for disposal.

It appears essential, first, to have a complete inventory of the property to be disposed of as it exists with full engineering specifications of the various buildings, machinery, and general equipment. The next step would be the pricing of that property upon a basis consistent with the conditions applicable to the individual case, ranging from the cost of reproduction new of the property down to its piecemeal liquidation price on the secondhand or scrap market. Generally, for properties having a value over and above salvage, it is desirable to know, as a starting point and a basis for comparisons, what they would cost to replace, or in appraisal terminology, their cost of reproduction new.

The physical condition of the property should be investigated and the information recorded with proper consideration for general deterioration resulting from age and use, such deferred maintenance as may exist at the time, and other condition factors affecting the desirability of that property compared with a similar property new. The cost of reproducing the property new, less an adjustment for such depreciation, plus a reasonable land value, might then represent what a potential purchaser could afford to pay for the property if it were exactly what he wanted, laid out exactly as he wanted it, and included the equipment which he required in its entirety for his proposed usage. The potential purchaser of an industrial property, however, is usually looking for a bargain, and it becomes necessary to negotiate a purchase price with consideration of that fact. The availability of facts and data under such negotiations furnishes the yardstick for the successful completion of a sale.

Unfortunately, this ideal situation seldom, if ever, occurs. Every operating management has its own ideas regarding buildings, equipment, and plant layout; no two managements will market their goods upon a basis requiring the same production lines, warehouse facilities, or office space. Obsolescence and lack of utility are largely a question of management policy; therefore, adequate consideration must be given for the extent these factors affect individual properties and the potential requirements of each industry.

We may broadly consider the factors of obsolescence under the following groups:

1. Locational obsolescence.
2. Design obsolescence.
3. Functional obsolescence.
4. Utility obsolescence.

LOCATIONAL OBSOLESCENCE

Locational obsolescence must consider the utility of the site; the shipping facilities, both incoming and outgoing; the availability of the required types of labor; the availability and cost of power; and last, but most important, the attitude of local, county, and state taxing authorities toward industry.

A company recently acquired an operating property in the vicinity of Pittsburgh on which the bare land value of the site was approximately $1.00 a square foot, or some $45,000 per acre. This particular site was improved by a going industrial plant, the operation of which would be continued by the purchaser. The type of industry for which this plant was equipped could not competitively operate with such an investment in land. Experience had indicated that approximately $8,000 per acre was the top price justified for that industry with the best locational advantage. Thus, either the bare land value had to be adjusted for this plant or the excess value considered as an obsolescence penalty against the value of the improvements.

In some rare cases, the improvements may cause an increment in land value over and above bare land value. Where the use of the property indicates such a condition, adjustments should be made in accordance with the determined facts.

Shipping trends are important matters for consideration. Railroad sidings must be available for companies having carload

lot shipments for either their incoming or outgoing requirements. The present policy of business to carry small inventories and to rely on quick shipments of small orders to maintain those inventories has tended toward the greater use of truck shipments. This type of quick shipment for small freight has been accentuated by the increasing facilities provided by the railroad companies for truck pickup service. The shipping and warehouse facilities at a plant should be given careful consideration in line with these present trends.

The extent to which this problem has become an increasing factor in business during the last ten years is evidenced by one concern whose incoming shipments ten years ago were approximately 90 per cent by car and 10 per cent by truck. Today, the situation is just reversed; 10 per cent of its shipments come in by car and 90 per cent by truck. The company now has a large factor of obsolescence in its railroad sidings and warehouse facilities and has had to provide additional facilities for handling the incoming truck shipments.

The type and character of labor and its available supply are important and fluctuate for different types of business. The company requiring a large amount of common labor must have a plant located near that available labor supply. The company requiring a higher and more specialized type of labor has a greater latitude in plant location; it can often locate its plant in suburban localities and draw upon a labor supply which will follow the location of that plant. Many types of industry have seasonal requirements for labor and have found it advantageous to have their plants located in suburban localities where they can draw upon farm labor during its off season.

There is a constantly increasing development in the use of farm products as the source of raw materials for manufacturing purposes. The demand for specialized plant sites in outlying communities can be encouraged by an investigation of the latest developments of our chemical and industrial engineers. The uses of soybeans and the extended use of plastics are relatively new examples of this type of industrial expansion, while the manufacture of celotex has long been an example of the use of agricultural by-products.

The type of industry and the character of labor required by that industry, as well as the market for the product of the industry, are important problems which should be considered in developing the potentialities and limitations of a given property.

The average plant having a reasonably steady power load requirement can purchase power from local utilities at prices which make individual power plants obsolete. This is particularly true for those companies that do not require large amounts of exhaust steam for manufacturing usage.

Taxes and the basis of assessment is necessarily an important factor to be considered by a purchaser of industrial property. Most taxing laws appear to contemplate the basis of assessment to be the fair market value of the property or its equivalent. Offer and sale prices are excellent evidence of fair market value. The common practice among assessors in general is to base taxing values almost entirely upon the cost of reproducing the property new, less condition or age depreciation, with general disregard for obsolescence and lack of utility. Little hope can be offered a prospective purchaser for industrial property that he can obtain an adjustment in his taxes upon the basis of the sale price. One important taxing authority is on record to the effect that "a sale or offer to sell property at less than its appraised value does not justify a reduction in the valuation of the property." The only sure way that a purchaser of property can obtain an adjustment in his tax base is to actually demolish or dispose of such portions of the property which he will not use or for which he would have such little usage as to prohibit their continued existence.

The location of the property must be such as to permit economic raw material shipments and a market for the finished product. History has seen the cotton mills of New England prosper for years at a location away from their source of raw materials and not too advantageously located for the product market. However, an ample and cheap labor supply, water-power facilities, cheap freight shipments, and low taxes for many years justified the existence of these mills at that location. In more recent years, increased labor costs, high taxes, materially increased shipping costs, and a trend of the market further away from that center have resulted in the abandonment of the majority of these New England cotton mills, in spite of their relatively low capital investment as compared with the higher investment in new mills located in the South, available to the source of supplies, with cheaper labor, adequate and economical electric power, and an equally good or better location for the product market.

There are many other examples of locational obsolescence. A large hotel in one of our principal metropolitan cities recently went through receivership, and equities to the security holders were reduced to approximately 25 per cent of the original investment. This was caused partly by the erection of a hotel building much larger than that required by the market but in a major part to the location, which was not as easily available to hotel users as that of the competitive hotels in the same city, with the result that the expected trend to the new location was never realized.

DESIGN OBSOLESCENCE

It would appear at the present time that industry is at a crossroads in economic plant design. We have one school of engineers advocating the windowless type of factory building with artificial light, heat, ventilation, and air conditioning. It is contended that where the character of the work of the laborer and his product are influenced by light, heat, and humidity, such facilities will insure a uniform grade of product.

We have on the other side the engineering advocates of steel frame, glass tile buildings, which provide the maximum of natural light and which may or may not be air conditioned. The economy of light and heat and the maximum space usage are among the factors justifying such buildings.

In addition to the above types, we have the streamlined building, which often has much advertising value and usually is so arranged as to provide the maximum of floor space available for productive usage. But few buildings of this type are as yet on the market except for new plants or plant additions.

The typical brick, mill type building, steel frame or reinforced concrete, represents the bulk of the available space now on the market or which can be expected for a number of years to come. It is the comparison between these types of buildings and the modern designs which must be considered in disposing of available industrial properties at this time.

The requirements of the individual types of business which might occupy a plant are again the basis upon which the comparison should be made. Different types of production require different building headroom. Truck distribution of materials throughout the plant can be operated with buildings having low headroom; tram or crane distribution, however, requires varying increased heights and types of buildings.

Air conditioning is a very rapidly increasing requirement of many types of manufacturing, and while makeshift installations are used in many plants, air conditioning service cannot be rendered economically without a properly designed and properly insulated building. Most plants are justified in their design by the opportunity for continuous floor production; generally, a plant comprising several small buildings is disadvantageous as compared with a plant of few large buildings.

The larger the plant held for sale, the more restricted is the market and the less the opportunity for its disposal. A large, well-built, and very desirable property originally costing some $12,000,000 has stood substantially vacant for years, even though offered on the market at a price of approximately 25 per cent of its cost. Another large plant in a different city, not so many years ago, could have been acquired from the owners with full title for the payment of the accrued taxes. Both plants were of modern design for the type of products required but were of such size that no market existed for their disposal, and they could not be used efficiently upon a piecemeal basis.

An office building having a rentable floor area of from 50 to 65 per cent of the total floor area was considered efficient and of modern design ten to twenty years ago, while today an office building must have from 70 to 80 per cent available rentable area in order to operate successfully upon a competitive basis.

FUNCTIONAL OBSOLESCENCE

There are two general types of production activity: the so-called mass production and the job production. Mass production activity is justified by large orders of a single type of product. Specialized, high-speed, laborsaving equipment so arranged to permit a continuous flow of work in progress from raw materials to finished product is the essential for successful mass production. The cost of equipping a plant for this type of production is large, and the operating labor requirement is proportionately small. The equipment must be capable of usage upon a continuous basis. Shutdowns are generally expensive, and the plant must be so engineered as to insure continuous operation. Stand-by equipment is essential to such operation.

On the other hand, the jobbing plant can operate upon a departmental basis, with complete or partial operations located in different parts of the plant and subject to accelerated usage when and as required. Continuity in the flow of the work in process is not necessary as is the case in the mass production plant.

In a consideration of the disposal of plants containing equipment that is functionally obsolete for mass production, it should be kept in mind that such facilities are often the best type of equipment for job production. The machine tool business is essentially a jobbing business and does not justify important equipment for mass production operation. An excellent example of this was revealed in an investigation of a large machine tool plant that specialized in the manufacture of mass production equipment. Even though this plant was engaged in the production of equipment of the most advanced design, it was using in its own operations an old type of chain lathe and other machine tools and equipment that would be considered obsolete in a mass production plant. The management advised that this equipment, remaining from or retaining essentially the same design as the original equipment installed in 1852, was serving its purpose better than any type of modern equipment of which they knew.

The steel industry has probably seen, and is continuing to see, more radical changes in equipment resulting from functional obsolescence than is experienced by most other types of industry. The various types of continuous mills requiring relatively small floor area, combined with the cold roll mills, have so reduced the costs of sheet and tin plate production as to obsolete much of the old types of equipment, which today can be profitably operated only on small orders. Similar conditions have taken place in the chemical, glass, and other industries.

Certain other types of properties, such as the paper mill industry, lend themselves to a piecemeal rehabilitation of equipment and processes necessary to keep plants modernized. Such an industry does not at any one time require a complete change in buildings or equipment, such as is necessitated in the steel and certain other types of industry.

Functional obsolescence, therefore, may result from the purpose for which the property is to be used as much as from its design, which indicates that a specialized consideration of each industrial plant available for sale and of the requirements of each potential purchaser for that plant are essential to the determination of the price which any purchaser can afford to pay for the plant.

UTILITY OBSOLESCENCE

It is seldom, if ever, that an industrial plant, available on the market, meets the design, production, or capacity requirements of any purchaser—power plants are often installed where power may be purchased from the utility; the building provides excessive headroom which must be heated and on which taxes must be paid; plant equipment layouts are inapplicable; and the equipment units have excessive capacity. Partitions are often provided to avoid heating surplus space and to separate unused equipment, but the maintenance service and taxes continue and the operating costs will be over those for the proper size and type of equipment.

In general, the larger the plant the more these factors become evident, and a correspondingly greater discount must be taken in establishing the proper selling price of the plant compared with the cost of a similar plant new. A balanced plant of the desired size is seldom available on the market, and these facts must be given recognition in estimating values and in determining offering and selling prices.

CONCLUSION

By giving consideration to the various factors of obsolescence and inutility, the basic standards of appraisal practice, and the market conditions, as outlined above, it would appear that the appraiser could be of great assistance to the owner and to those responsible for the sale of industrial properties. The first consideration for a mutually satisfactory meeting of minds on the part of the owner, the liquidator, and the purchaser of a property should be a full and complete presentation of the property facts. Not only might this well include a complete general description of the property, but a detailed inventory, including itemization, correct technical descriptions, capacities, and per cent conditions for the major units and classifications of assets.

Upon the basis of these fundamentals, costs, obsolescence, inutility, and offering price may be analyzed specifically and the values computed in accordance with the existing market conditions and the requirements of the prospective customer.

The yardstick for the initial measurement entering into the determination of value is the investment that would be required to replace the property (cost of reproduction new, less depreciation) to represent the full value for use by a going concern having capacity use for the property. From this base, allowances may be made for such reductions in value as may result from the various forms of obsolescence and inutility, the prevailing market conditions, and the particular requirements for general classes or individual prospective purchasers.

Excess plant should be eliminated; or, if it has a separate liquidation value, it should be included as such. The carrying costs for the excess plant to remain in use should be estimated and the proper adjustments made so that the usable portions of the plant will not be at a price in excess of that property, including an adequate provision for those carrying costs.

The value of the site should be considered in relationship to economic land values which various industries can afford to carry for their industrial properties. The cost of locational disadvantages should be estimated for a reasonable basis of production and the value of the operating plant adjusted in accordance with the capital value of such costs. The design of the plant should be carefully considered, and the cost of such rehabilitation and changes as would be required, including

demolition costs, should be considered as an adjustment factor in any basic price.

The results of such an analysis of any property should be carefully compared for the different types of industries which could use the property and should be checked against unit rental and lease values of similar properties for substantially the same usage.

The following example may serve to illustrate the mathematics and logic of the processes of elimination in arriving at value for different purposes:

1. Continuation of normal use, assuming competent management, a marketable product, and a profitable going concern.

Cost of reproduction new		$1,000,000.00
Less: Normal depreciation	$250,000.00	
Special obsolescence	100,000.00	
		350,000.00
Sound value to going concern		$ 650,000.00

2. Adjustments for average expectancy of use to others who might reasonably be purchasers of the property for somewhat different usage:

Loss on excess land value	$ 50,000.00	
Loss representing the difference between the sound value and salvage value of excess improvements to be discarded	150,000.00	
Additional functional depreciation	75,000.00	
		275,000.00
Use value to an average prospective purchaser		$ 375,000.00

3. Adjustments for specific customer requiring less capacity but with good prospects for somewhat different type of product:

Loss on account of required reconstruction and alterations	$50,000.00	
Loss on additional equipment to be salvaged	25,000.00	
Loss through increase in inadequacy and functional depreciation	35,000.00	
Allowance for carrying charges on remaining temporarily excess capacity of buildings and equipment	20,000.00	
		130,000.00
Use value to a particular customer for a specific purpose		$ 245,000.00

In the above, we have aimed to give consideration only to the service value of the property for use and what the purchaser could afford to pay for that usage. These are important elements in the determination of what a purchaser might be willing to offer for the property under the particular circumstances and the market conditions at the time of offering for sale.

This offering price would involve consideration of general economic conditions, similar properties on the market, sales of other property, and the availability and prices for secondhand equipment. Consideration of these factors by the appraiser may result in the judgment that a purchaser would be willing to pay 100 per cent, 50 per cent, or some other determinable percentage of the use value to him. The minimum value, however, would represent what the site could be sold for plus the piecemeal price realized through disposal of the buildings and equipment on the open market.

A fixed property without an established business has many hazards to overcome in its sale. In many cases a purchaser will refuse to consider a price in excess of 5 per cent of the cost of reproduction of

the property, even if it is in good physical condition. Generally, the larger the property, the more scattered is the market and the greater is the hazard of ownership; consequently, a smaller percentage of the reproduction cost is realized. Smaller properties might easily have a sale value of from 30 to 40 per cent of the cost of reproduction; but again, in each case, the price should be determined in accordance with the use to which the property is to be put and what the purchaser can afford to pay, with consideration for the hazards of acquiring any individual plant.

The results of such a careful analysis of the properties will place the seller or his agent in a position to answer questions and offer recommendations which should facilitate the sale of the properties. Without such information and with reliance upon general sales activities only, it would appear that many industrial properties are delayed in their sale or sold upon a disadvantageous basis.

In many cases, proper analyses of this type have facilitated the sales of the property and formed the basis for negotiations. Civic organizations and adjoining railroads are active in work of this type, but their interests are not as direct and their investigations are on a broader scale than indicated by this discussion.

An actual example on which I was recently engaged involved four plants located in separate cities. The equipment, for the most part, had been stripped and the question of the price for the land and buildings was at issue. The cost of reproduction less depreciation for the properties amounted to approximately $3,500,000. We prepared a report setting forth the advantages and disadvantages of each of the properties and subject to an analysis of the facts in accordance with existing conditions. A copy was submitted to the seller and also to the prospective buyer. The indicated asking price was $650,000, and within a few days the prospective purchaser presented a bona fide offer of $550,000, advising that he had arbitrarily cut the asking price $100,000 in line with the bargain which he expected in acquiring the property. The sale was quickly consummated at that price.

The recommendation of this discussion is that all facts be available before attempting to negotiate a sale; do not try to collect such facts after the negotiation has started.

Upon These Things Have I Relied

By VICTOR J. FREE, M.A.I.

AS one to whom appraisal reports come frequently for review, this writer respects that workman who, early in his letter of transmittal, says:

"I have relied upon the following in reaching this estimate of value."

It is then desirable that he should state clearly, definitely, and briefly exactly that upon which he did rely.

It is often more valuable to know the appraiser's trend of thought than to examine his conclusions. If he states early in his report that it is a ten-suite apartment house property which he has appraised; that its estimated net income has been considered carefully as a basis in reaching an opinion; that, in pursuit of such estimate, greatest credence has been given to data that touched the neighborhood, the ratio of comparative stability, and rental levels and their probable continuance—there arises the suspicion, at least, of well-organized thought. If the appraiser further states that, when the net annual return had been determined, he employed the property residual procedure and that he used an over-all capitalization rate which combined a given rate for land and another rate for building, reasons for which were recited in subsequent pages, the reader would begin to believe in that appraiser as someone new and desirable in a confusing world.

It is better still, and most satisfying, if, after saying that he "relied upon these things," he did absolutely rely upon them—he did not hedge; he did not shift; he did not "average." He set his feet on the ground and relied upon judgment and procedure—one procedure, into which was put all of his knowledge, all of his experience, and all of his integrity. For him the nirvana of appraisers awaits!

Comprehensive and intelligent data and factual information and knowledge make up the background from which emerge reasonable opinions of value. No quarrel is sought with those who glean the bottom of the chaff or those who comb together remote threads of evidence. But, having torn the whole asunder from the farthest termite in the basement to one warped shingle on the roof, let them return quickly to consequential things in which reliance may be placed.

THE PLAN

Somewhere in the beginning there must be a plan based upon the purpose of the appraisal and the location and character of the property. Data, important though they are, have value only as they lend themselves to the development of the appraisal pattern and the solution of the problem. How can they so do if the problem is vague and the purpose unknown? Valuation horizons are often clouded by data vaporings. A thoroughly defined plan of procedure will eliminate worthless data before they are collected. Every bit of pertinent information is desirable, but data sheets, repetitious and unreasonably exhaustive, are more perplexing than helpful. The grain of truth sought so feverishly may be lost in a blundering accumulation of confusing and perplexing detail.

Nevertheless, if the appraiser enjoys an intimate, personal relationship with each blade of grass, let him pursue his happy way. When he returns to his office, if he is a real appraiser and not a research statistician, he will utilize the wastebasket generously and gaze fondly upon those facts which lend themselves surely and swiftly to a reasonable value estimate. And, after separating the sheep from the goats, may he in all conscience say: *"These are the things upon which I have relied."*

From coast to coast, wherever two or three appraisers have come together, theory stands among them; the sirens of varying procedure beckon them onward.

Into the morass of the ridiculous they stumble along, finally striking an *average* which they call *value!*

"I determined the reconstruction cost new of this ten-suite apartment," he said, "and from that I deducted 38½ per cent for depreciation—all causes." The intelligent client swore wickedly.

It so happened that this apartment building had suffered from changing and damaging neighborhood conditions. A changing neighborhood has no relationship on the reproduction cost; it is an element apart from the price of materials and labor or the physical condition. If mortar joints have loosened; if a new roof is needed; if equipment has become exhausted, then these things have to do with reproduction cost because they may be restored. But the obsolescence of the neighborhood may best be calculated otherwise—measured in dollars and properly deducted from some indicated reproduction cost. For example, the appraiser might state:

> "I capitalized at a fair investment rate of interest, the difference in net income between this building and the same building in a neighborhood that had not suffered the misfortunes of undesirable encroachment, and this sum I deducted from physical reproduction cost new as a measure of accrued depreciation through neighborhood decadence."

FOLLOWING THE PLAN

The above reasoning seemed sane and rational for this appraisal, and, having so decided, the appraiser relied upon it. He did not back up anywhere in an effort to "reconcile" other approaches by lopping off a few thousand unsuspecting dollars here and there. He did not pursue one approach until it jumped the bounds of reasonableness and then place his affections elsewhere. He did not juggle a dizzy capitalization rate to force a balance between procedures. From the time of his preliminary examination of this property, he knew which data and which procedure would be applicable. He did not clutter up his mind; he did not hypnotize his judgment; he threw no fit and entered no trance. Neither astrology nor tea leaves were consulted. He remained a real estate man of judgment, experience, and integrity. From his toolbox he brought forth those implements of procedure that were applicable to this appraisal—and he relied upon them!

Later in his work, he sought vast data of rentals in a wide neighborhood surrounding this apartment. He knew the rentals charged and paid. He weighed, sifted, selected, and finally decided present fair rentals. He did not forecast the future beyond that light which the present gave him. He used his knowledge of economic forces—the social, business, and neighborhood trends of the city—and considered something of cycles.

"Through ups and downs," this appraiser stated, "this building and this land will remain together for twenty additional years, and I believe that the net annual return therefrom for such a period will not vary greatly." Thus was selected a "remaining useful life," and he realized upon it in his economic theory of valuation. The report read:

> "This land and this building, perhaps not always in harmony, must remain together in one property for twenty years. They must work together until age and obsolescence part them. Therefore, I have selected the property residual procedure in seeking the present worth of an annual income. In the analysis of this estimate of value, I have considered the compound interest valuation premise of Inwood's computation as reasonably applicable. This premise contents itself with interest and ultimate capital return without presuming that the investor will resort to a low interest sinking fund depository for the final restoration of capital. If the asset were wasting rapidly—some other and more drastic means would be considered in the preservation of capital."

This appraiser selected one over-all capitalization rate, which required some thought as between land and building values, and, after selecting it, he relied upon it, made his mathematical calculations, and announced the result. The review appraiser liked the report, and because the investigator out in the field had permitted his honest self to reach

the surface, because in the report he had combined purpose, data, procedure, and experience, because above all else it savored of something sound and sensible in which he had placed his reliance, this appraisal was forwarded to "the gods of the inner temple" with a recommendation that the loan be granted. And it was granted because the appraiser had marshalled into his report five things:

(1) Purpose of the appraisal.
(2) Data relevant to the property.
(3) A selected procedure.
(4) Experience, knowledge, and honesty.
(5) Reliance upon reasonable things.

THE DEMONSTRATION

In the following pages the above mentioned appraisal of the ten-suite apartment building is presented. There is nothing exceptional about it, unless it be that this appraiser refused to apologize and refused to vacillate; instead, he selected data and procedure and announced a result. Here is the demonstration:

Great Lakes City, Ohio
December 11, 1937

Prairie Central Life Insurance Company
Osborne City, Iowa

Gentlemen:

Pursuant to your request of December 4, 1937, I have examined with care the property at 1115 South Jones Street in the city of Great Lakes, Ohio, and return herewith as of December 11, 1937, this estimate of market value: *Twenty-four thousand, five hundred dollars ($24,500).*

The purpose of this appraisal is that you may determine whether the renewal of a mortgage upon this ten-suite apartment property is advisable and for the best interest of your company. Therefore, I have considered market value only, leaving to your judgment the loan percentage of such value which you may consider safe and equitable.

I determined the market value to be the present worth of all the future benefits arising from ownership of this property—the present worth of a stream of net earnings during the reasonable remaining life of the building, to which I added the reversionary land value at the time the building has been exhausted.

In reaching this estimate of value I have relied upon the following:

(1) Neighborhood analysis and remaining expectant life.
(2) Rental levels of the neighborhood and their probable continuance.
(3) Economic and social forces in the city and neighborhood.
(4) A fair annual level of net income.
(5) The property residual procedure and the compound interest valuation premise, using the Inwood tables.
(6) An over-all capitalization rate with adjustment for land and building values, determined by comparison.

I thank you for this opportunity of serving you and trust that the report will be found satisfactory.

Yours very truly,
RICHARD ROE, M.A.I.
Appraiser

THE APPRAISAL

Legal description:

Situated in the city of Great Lakes, Ohio, and known as sublot No. 120 in the Jones and Marshall Subdivision of Tract 4, Range 14, as shown in Volume 8, Page 112, of the records of Great Lakes County. Said sublot No. 120 is located on the northerly side of South Jones Street and has a frontage of 60 feet thereon, extending back between parallel lines to a depth of 136 feet, be the same more or less but subject to all legal highways.

Great Lakes City:

Great Lakes City is the western metropolis of Ohio, a railroad center and the trading point for a vast, productive, and wealthy agricultural community. It is a merchandizing mart and an industrial, manufacturing, and distributing center for a population of one million people. Its schools, churches, chamber of commerce, and public agencies are characteristic of its youth, its civic vision, and its social and economic stability. During the late depression it suffered less than most metropolitan areas, and its recovery has

been rapid. It has a good local government, high civic ideals, and is altogether a prosperous and forward-looking community. Its industries, railroads, and merchandising and financial agencies indicate a continuance of more than a normal increase in population and wealth.

The neighborhood:

South Jones Street is located four and one half miles northwest of the center of the city. It is reached by surface street cars at its intersection with West Market Street, two blocks from the subject property, and the running time to the central business district is twenty minutes. Intersecting surface lines at transfer points bring all parts of the city into easy communication. City-owned and city-operated bus lines, connecting with car lines and reaching newly developed areas, furnish additional transportation for this neighborhood.

This area was developed twenty-two years ago. It has all public utilities, paved streets, and easy access to boulevards that reach the business districts with a minimum of traffic hazards. The entire area is substantially level.

Zoning and restrictions:

The neighborhood is restricted to residential use with the exception of the four corners at the intersection of Jones and Market Streets, where retail business and automobile service stations are located. These restrictions, in conformity with later zoning, have produced single, two-family, and apartment houses. South Jones Street in this neighborhood has nine single houses, eighteen two-family houses, eleven apartment buildings, and four vacant lots. It is typical of the several streets north and south of Market Street which comprise the neighborhood.

This is not a new neighborhood, and it is not a stylish one. As a whole, the section has suffered from age and undesirable racial encroachment. It is a secondary apartment neighborhood in which buildings have an average age of eighteen years. It is attractive to middle-class families, whose incomes range from $1,500 to $3,000 per year and whose rental outlay lies between $30 and $60 per month. Sixty per cent of single and two-family houses are owner-occupied. Statistics show an over-all residential vacancy ratio of 8 per cent for 1935, 6.5 per cent for 1936, and 5 per cent as of September 1, 1937. In 1935 and 1936 a total of seventy-one families moved out of the district and ninety-six families moved into it. This movement in a population of approximately 900 families indicates a stable and desirable rental situation for the neighborhood.

Land:

The value of this land, established by comparison with sales, offers to purchase, and brokers' listings, is estimated to be $4,000. It now serves its highest and best use.

Building:

The building was erected in 1924 and contains ten rentable suites—eight with five rooms and one bath each and two with three rooms and one bath each. It is a two-story and English basement building, with wire-cut tapestry brick with stone trim on all elevations. The two rentable suites of three rooms and bath are located in the basement, and there are four of the five-room suites on each of the first and second floors; in addition, there is a three-room basement suite for the janitor.

Construction:

The basement has concrete floors and a ceiling height of nine feet. The three suites located in the front of the basement are separated by a twelve-inch brick fire wall from the rear basement, which contains the boiler room, the laundry, and the lockers. The ceiling of the rear basement is plastered, and the walls are painted hollow tile. An examination of the plans in the building commissioner's office showed footings three feet below floor level and three-inch by twelve-inch yellow pine floor joists on twelve-inch centers, braced and bridged in conformity with good building practice. There is no evidence of termites nor dry rot. Base-

ment walls are eighteen inches thick, while the walls above grade are thirteen inches thick and have a four-inch brick course over eight-inch hollow tile.

The roof is of six-ply composition built-up construction and slopes to roof drains at the rear of the building.

All outside openings are fully weather-stripped. There is one principal entrance to the building from South Jones Street. The fire escape and service stairways are at the rear. The lobby has plastered and painted walls with tile floor and oak stairways leading to the basement and upper floors. Center halls extending lengthwise on the first and second floors divide the space so that there are two suites on each side of each hall.

Interior of suites:

All floors are seven-eights-inch oak over diagonally laid subfloors. The doors and trim are birch, and the kitchen floors are covered with linoleum. The bathrooms have tile floors, built-in tubs with overhead showers, three-quarters tiled walls, and a fair grade of fixtures, with pedestal washstands and semi-noiseless, low-flush toilets.

Each five-room suite has two bedrooms, each with a clothes closet; living room with guest closet, book shelves, gas log fireplace, and birch mantle; dining room with corner china cabinets; and kitchen equipped with cupboards, shelves, roll-rim sink, broom closet, ironing board, and refrigerator space. The light is fair in all rooms but it does not meet modern requirements in better planned buildings. The three-room suites have the same type of floors and trim as the larger suites. They have one bedroom each and an in-a-dor bed in the living room. Bathroom fixtures are identical with the larger suites.

Each kitchen of the ten rentable suites is equipped with a gas stove and an electric refrigerator. All window shades, curtain rods, and gas logs also belong to the property.

Equipment:

A sixty-horsepower steam boiler from the Titusville Iron Works (Titusville, Pennsylvania) was installed when the building was erected and has been efficiently maintained. Its record of performance is good. There is a submerged hot-water heating installation with a 300-gallon tank and an instantaneous gas-heated hot-water unit for use in summer months. The heating system is a two-pipe return system with low-type radiators. All heating pipes are covered. Radiation seems adequate, and the tenants appear satisfied.

Cast-iron water piping has been used in all cases except for elbows, fittings, and valves of the hot-water lines which are of copper. There is no evidence of serious rust or corrosion. All electric wires are in conduits; outlets are sufficient in number. However, electric fixtures are out of date and should be replaced. All gutters and downspouts are of copper. Call tubes and mailboxes for all suites are located in the vestibule.

Condition:

The general condition of the building is good, with the following exceptions: All exterior woodwork and the iron stairways in the rear should be painted. Old electric fixtures in the living rooms, dining rooms, and the entrance vestibule should be replaced. The same applies to the hall carpeting on the first and second floors. These improvements will cost approximately $600 and are considered necessary for continued desirability of the suites.

Tax valuation:

This property is valued for taxation as follows:

Land	$ 3,600.00
Building	12,600.00
Total	$16,200.00

The tax rate is $25.60 per $1,000 valuation, making the present annual taxes $414.72.

Reproduction cost [new]:

Building 42'x90'x30'= 113,400 cu. ft.; 113,400 cu. ft. @ $0.35= estimated cost new....		$39,600.00
Depreciation		
Physical	$ 6,500.00	

Equipment (restoration)	600.00	
Obsolescence (changing neighborhood)*	10,000.00	
		17,100.00
Indicated value of building		$22,500.00
Value of land (comparison)		4,000.00
Indicated property value		$26,500.00

*In a consideration of the loss through the changing neighborhood, it was estimated that this building after expenditure of $600 for renewal of equipment, if located in a 100 per cent neighborhood, would bring rentals above present levels of $10 per month for the five-room suites and $5.00 per month for the three-room suites. If this added annual rental of $1,080, less 10 per cent for vacancies and 5 per cent for management charge, is treated as added income for the remaining life of the building and the present worth of such estimated additional income is computed, we have 10.594 (Inwood factor for 20 years at 7%) × $918, or $9,725. This is considered for purposes of this appraisal to be $10,000.

Economic procedure:

Gross Income

	PER YEAR
4 suites @ $50 per month = $200	$2,400.00
4 suites @ $45 per month = $180	2,160.00
2 suites @ $35 per month = $ 70	840.00
Total Gross Income	$5,400.00
Less: Vacancy and rental loss (10%)	540.00
Gross Effective Rental	$4,860.00

Operating Costs

	PER YEAR	
Coal (98 T. @ $5)	$ 490.00	
Decorating, paint, and shades	400.00	
Exterior maintenance	100.00	
Water (actual)	110.00	
Electricity (actual)	220.00	
Gas (actual)	50.00	
Janitor (plus suite)	240.00	
Miscellaneous	70.00	
Management	245.00	
		1,925.00
Fixed Charges		
Taxes (actual)	414.72	
Insurance (actual)	172.00	
		586.72
Reserve for Replacements		
Refrigerators (15-year life)	84.00	
Stoves (15-yr. life)	20.00	
Carpet (8-yr. life)	27.00	
Roof (15-yr. life)	24.00	
Boiler (15-yr. life)	50.00	
		205.00
Total Charges		$2,716.72
Net Income to Property		$2,143.28
	Say	$2,150.00

Assumptions:

1. That rental levels may be stabilized upon the preceding basis for twenty years.
2. That the property residual pattern best fits this property.
3. That a 7 per cent interest rate for the investor and a 4 per cent basis for land reversion are fair and equitable.
4. That the Inwood procedure of the Compound Interest Valuation premise is indicated.

Procedure:

10.594 (Inwood factor 20 yrs. 7%) × $2,150	$22,777.10
.4564 (Factor for 20-yr. reversion 4%) × $4000	1,825.60
Indicated value of property	$24,602.70
Say	$24,600.00

Comparative results:

Reproduction cost, less depreciation	$26,500.00
Capitalization of estimated net income	$24,600.00
Estimate of market value	$24,500.00

Certification:

I hereby certify that I have examined this property personally; that I have checked and considered rentals paid in a wide neighborhood; that I have compared this building and these rental units with other similar property; and that I have considered maintenance, management, and competitive prices. As a result of the foregoing and other things, I have placed my reliance in the economic approach, using physical reproduction only as a check thereon. In my opinion the property herein appraised has a market value as of this date, December 11, 1937, of *twenty-four thousand, five hundred dollars ($24,500).*

RICHARD ROE, M.A.I.
Appraiser

So the appraiser concluded his report. He dodged no issues; he set up no unknown gods; and he did not shadowbox with conjecture. He proceeded along a selected path that approached a reasonable conclusion, saying in effect: *"Upon these things have I relied; in them have I placed my trust."*

ARE YOU STRONG ENOUGH

To be—

Right and not boast
Wrong and not alibi

Rich and not arrogant
Poor and not covet

Successful and strut not
Failing and quit not

Honored and modest
Ignored and unresentful

Hurt and forget it
Criticised and take it

Tempted and resist, and
Honest when it hurts?

And can you unto others do,
As you would have them do to you?

If to these you have attained—

You Are Strong.

D. HOWARD DOANE.

Certain Fundamentals of Appraising

By E. L. OSTENDORF, M. A. I.

IT is not an easy matter for an appraiser to keep his feet on the ground in these days when we hear and read so much about theory and about technique, both pro and con. Even the "old-timer" is apt to be confused by the passionate declarations of the pioneer thinker whose new-found formulae are offered as the only reliable measures of exact value, and the novice is almost certain to be bewildered by the potpourri of Hoskold, Inwood, residual mechanics, reversions, annuities, declining curves, compound premises, and other such matters that fill the pages of current appraisal literature and crowd the speeches at our conventions.

I do not mean to speak disparagingly of the pioneer thinker—God bless him! May his number increase! Without him we should learn nothing new, and there would be no progress. I have no intention of belittling the importance of technique. We cannot appraise complicated properties in these complex times without the use of various kinds of technique. In fact, it is not possible to make any kind of an appraisal of any kind of a property, however simple, without using a technique of some kind.

However, I do believe that many of us frequently become so involved in the process of appraising that we forget what it is we are really trying to do—to estimate the value of a particular real property. Just as frequently, others who rely blindly upon such rules of thumb as "seven times the gross income," front foot, square foot, and cubic foot multipliers, sales prices, costs of reproduction, or capitalization of income as the sole measure of value lose sight of the nature of value itself and of the purposes for which appraisals are made. At such time it is helpful to do a little reflecting about fundamentals and get our feet solidly on the ground again. Common sense in real estate appraising, as in most other things, is very largely a matter of keeping the fundamentals in mind.

First of all, it seems to me, we need to remember what value is. It is so easy to forget abstraction, however vitally important it may be, when we are face to face with a pressing concrete problem. This is especially true in cases where we have at hand rules of thumb which have been in common use through generations of time. Much of the work of modern scientists in the field of medicine and surgery, in the field of electricity and radio, in the field of agriculture, and in other fields where modern developments have contributed to so much of the happiness and welfare of mankind has had its origin in abstractions and theory. In these fields we have learned that there is a close relationship between theory and technique on the one hand and concrete, practical results on the other.

THREE BASIC FACTORS OF VALUE

We are beginning to appreciate that the same relationship holds true in the fields of real estate values, and so I say that in our work we do frequently lose sight of the fact that value is basically the ability of wealth in one form to command wealth in another form in exchange and that this concept, abstract though it may be, is the key to sound appraising. The rule-of-thumb appraiser, the equation-minded appraiser, and many of the rest of us find it difficult to remember that value results always from a combination of the three basic factors—human need, human desire, and purchasing power.

Real property has no market value unless someone needs it or wants it and, at the same time, possesses something of value to offer in exchange for it. This is a simple fact—but it is foundational. It is the first great fundamental of appraising.

It is not difficult to understand. It is the base upon which all sound appraising must rest. This applies to single-family homes as well as to stores, office buildings, apartments, hotels, factories, and farms—it is true of all types of real estate.

VALUE IS NEVER STABLE

The second fundamental of appraising which comes to my mind is the fact that value is never stable. It is always in a state of flux. It varies from place to place and from time to time. With the ebb and flow of human affairs, the needs and the desires of people for a given type of real estate change. There are changes also in the supply of any given type of property, in the ability of people to buy such property, and in their ability to pay rent for it. In fact, these are the only things that do affect value—variations in need, variations in desire, and variations in purchasing power.

Therefore, what the appraiser undertakes to do, fundamentally, in estimating market value is to express in terms of money the equilibrium of human need or desire for that particular property on the one hand with ability to offer other wealth in exchange for that property on the other hand. This is what the appraiser must measure in order to make a supportable estimate of value, and this is the reason why he will always "miss the boat" if he confines his attention solely to the physical property. He must, of course, make a thorough analysis of the property; but that analysis will be meaningless unless it is related to a number of important things entirely outside of the property itself. The property must be interpreted in terms of the needs of the people in the community, in terms of their attitude toward the location of the property, in terms of their desire to use the property, and in terms of their ability to pay for that use. The appraiser must study population trends, marriage rates, racial distribution and density, standards of living, moral and ethical attitudes of the people, civic affairs, wage levels and trends, unemployment, vacancies, and scores of other neighborhood factors that closely affect the utility and the desirability of every piece of real estate in the community. All of this involves neighborhood analysis as well as property analysis. Call it by another name if you like—"intuition," "sense of value," "experience"—but whatever you call it, it is something you must do in one form or another before you are entitled to have any opinion whatever about the value of the property you are appraising.

This, too, is a simple fact. It is not hard to understand that this close relationship does exist between physical properties and neighborhood forces. It is plain common sense—when the appraiser forgets it or ignores it, he is no longer standing on solid ground.

At this point, and with these basic facts in mind, let us note the futility of relying upon front foot, square foot, or cubic foot standards—of relying entirely upon the multiplication of the gross income by the mystic figure seven—or of using any other device that does not automatically reflect and gauge the living, changing forces of human need and desire in relation to financial ability.

NO ONE "YARDSTICK" IS ADEQUATE TO MEASURE VALUE

The third fundamental of appraising is the fact that no one yardstick is yet known which is, of itself, an infallible standard for the measurement of market value. There are only three yardsticks—if they may be called that—for gauging the amount of value possessed by a property. These three are: sales prices, costs, and income capitalization.

There are no other bases upon which value can be estimated in terms of money. Each one of these three is to some degree a gauge of need, desire, and purchasing power. They give the appraiser logical and convincing grounds upon which to set minimum and maximum limits of value. They are the only foundations upon which

"supporting evidence" can rest. Each one is indispensable to the appraiser, but not one is wholly dependable.

One of the most significant developments in the field of real estate appraising during the past five years is the growing realization by appraisers that value cannot be precisely measured and that a sound and supportable estimate of value involves the application of all three of the fundamental approaches: sales prices, cost estimates, and capitalization of income.

We are beginning to realize too that there are a great many phases of these three approaches about which we know very little. A thorough and efficient job of comparing properties or of comparing sales prices requires a tremendously wide range of knowledge and a high degree of skill. Accurate cost estimates involve a knowledge of architecture, engineering, labor problems, and construction materials. Capitalization of income requires a working knowledge of accounting, economics, investment principles and practices and expert skill in the selection of rates and in the handling of the mechanics of the capitalization process.

Real estate is no longer simple. It is highly complex. And this is because real estate is so closely related to the complex, economic, social, and civic affairs of the human race. No one but an expert in the fullest and truest sense of that term can understand real estate today. Only such an expert is qualified to estimate its value. The time is coming when only an expert of proven ability and integrity will be permitted to make appraisals. The tendency in this direction is reflected by the fact that insurance companies, certain Federal and state governmental departments, and other institutions are turning more and more to the M. A. I.s for appraisal counsel and work. It is reflected also in the increasing number of bills to license appraisers that are being introduced into state legislatures. There is a growing demand for the services of professional appraisers.

The American Institute of Real Estate Appraisers was organized to meet this demand. Young as it is, it was the first professional appraisal society in this country, and its standards of competency and integrity have not yet been approached by any other group. The Institute is dedicated to the primary objectives of creating and maintaining high standards of competency and integrity and of serving as a broad training school in which its own members and others can learn more about fundamental principles and sound procedures.

Let me repeat that common-sense appraising is very largely a matter of keeping the fundamentals in mind; of being fully informed about all of the factors that create, condition, or destroy value; and of applying this knowledge to the appraisal of particular properties with the thoroughness of a scientist and the skill of an expert.

Farm Land Appraisal Standards

By RALPH V. FIELD, M.A.I.

A REVIEW of the articles on farm land appraising published in the JOURNAL and in other publications during the last five years shows rather conclusively that appraisal standards for the appraisal of farm lands have not advanced as rapidly as the appraisal standards for other classes of real estate. This is due, to a considerable extent, to the gradual and continued increase in farm land values from 1850 to 1920.

In Illinois this increase by ten-year periods was unbroken during this time. According to the records of the University of Illinois Agricultural Experiment Station, the average valuation per acre of farm lands and buildings in Illinois from 1850 to 1920 was as follows:

1850	$ 7.99
1860	19.56
1870	28.45
1880	31.87
1890	41.41
1900	53.84
1910	108.32
1920	187.59

While $187.59 was the *average* for all farm lands in Illinois in 1920, top figures were above $500 per acre. By 1925 the valuation average dropped to $136.65 per acre and in 1930, to $108.68. There was a further lowering until 1933, when farm lands began another increase, which increase is now gradually carrying top figures in Illinois toward $200 per acre.

The record for the United States as a whole agrees fairly well with the record for Illinois. In 1850 the value of farm lands and buildings throughout the United States averaged $11.14 per acre; there was a gradual *increase* for the next forty years to $21.31; a decrease to $19.81 from 1890 to 1900; and then an *increase* for the next twenty years to $69.38—that is, with the exception of one ten-year period (1890 to 1900) there was an unbroken increase in farm land values over the whole of the United States from 1850 to 1920.

Alternated with periods of prosperity, there were about ten periods of depression from 1850 to 1920, six of which may be regarded as major depressions. The final depression, starting about 1929, covered the greatest period of time and was the most severe.

FARM LOANS WITHOUT APPRAISALS

The history of farm land values in Illinois and in the United States generally indicates that during periods of prosperity farm land prices and presumably values advanced rapidly; during depressions, few sales were made, but, until the great depression started in 1929, there does not appear to have been great recessions in farm land values in the United States at any time. Accordingly, mortgage companies, insurance companies, banks, private individuals, Federal Land Banks, and other Federal agencies making loans on farm lands did so upon the assumption that farm lands had increased in value since the first settlement of the country and therefore would continue to increase in value. Loans on farm lands were made upon this assumption, and, in many instances, they were made without a proper appraisal of the land on which the loan was placed. If the lands were appraised at all, the appraisal was by "rule of thumb" and a matter of form rather than a sound investigation and consideration of all the facts regarding the farm offered for security of the loan. This, again, was upon the assumption that farm lands had always increased in value, that they would probably continue to do so, and that any loan made on a farm, even up to 75 per cent of the market value of similar farms in the community, was sound.

This practice tended to make the appraisal of farm lands a matter of routine;

no appraisal standards were established, and none was attempted. Little if any regard was given to the earning capacity of the farm. Many times loans were made without either appraisal or inspection. Under these conditions and practices, which were followed pretty generally from 1850 to about 1920, it is not surprising that appraisal standards for the appraisal of farm lands have not kept pace with the development of appraisal standards for the appraisal of city properties. The situation changed very materially when the flood of farm lands came into the possession of the mortgagees with the depression years, starting in 1929. During these years it was fully realized that it was absolutely essential to standardize the practice of the appraisal of farm lands.

NATIONAL JOINT COMMITTEE ON RURAL CREDITS

In the fall of 1933 a committee was formed in St. Louis, known as the National Joint Committee on Rural Credits. Three main groups were represented on the committee—creditors, debtors, and the middle group. Creditors were represented by insurance companies making loans on farm lands, by the Federal Land Banks, and by the Joint Stock Land Banks; the debtor group was represented by two of the leading farm organizations; and the middle group, by the American Society of Farm Managers and the American Farm Economic Association. The central committee appointed a subcommittee on appraisals; this committee held meetings during the winter of 1933 and 1934 and published a preliminary report entitled, "Standards of Practice for Rural Appraisers."

The above mentioned report contains much of value to every person and organization interested in the appraisal of farm lands for mortgage loan purposes, and as it is further improved and developed, it will probably form the basis of valuable standards of practice for the appraisal of farm lands for such purposes.

The following definitions constitute the basis of the standards of practice as promulgated by the National Joint Committee:

1. *Rural Appraisal*
   "An appraisal is the definite, written detailed opinion of a qualified individual or group of individuals of the basic value of a rural property."
2. *Basic Value*
   "Basic value is the worth of a property derived from such economic elements as earnings, location, and home uses."
3. *Earnings*
   "Earnings constitute that portion of the total income derived from the typical use of a property which can be assigned as payment for its use."

The above is set out in the January, 1935, issue of the JOURNAL in an article entitled, "A New Approach to Rural Appraising," by Hudson Burr, pages 155-164.

The article concludes with the following example of the appraisal of a typical grain farm in the Mississippi Valley:

Earnings value—net return to owner, $820, capitalized @ 5% is	$16,400.00
Negative adjustment because of poor location, etc., $7 per acre (160x7)	1,120.00
	$15,280.00
Adjustment for buildings (as they are inadequate, add actual replacement value)	2,000.00
Basic Value	$17,280.00
Recommended Sales Price	$20,000.00

"Reasons for increase over Basic Value—present grain and forage prices are materially higher than those used in Income Statement. Many of the community difficulties have centered around closed banks, but this will probably be corrected in the near future. It is reported that quite a number of Amishmen have only recently moved into the community, and it should be possible to interest others. While the livestock troubles are now being talked about, they should be overcome eventually."

Is this a fair illustration of the application of the "Standards of Practice for Rural Appraisers," as outlined by the

subcommittee on appraisals? If so, is it any better than the so-called "horse-back" appraisal made by a well-qualified real estate broker dealing in farm lands?

HOW DO BUILDINGS AFFECT THE APPRAISED VALUE OF FARMS?

In an article entitled, "Estimating the Value of Farm Lands," by True D. Morse, published in the April, 1936, issue of the JOURNAL, the author states:

> "Building values, as such, are not set out in this appraisal. The question of whether the final building value should be added to or subtracted from the basic value is not generally agreed upon. One group says that income for buildings is shown in income from pasture and building rent, and cost against them is shown in taxes, insurance, and maintenance, and hence they are fully accounted for in the final basic value.
>
> "Others say they are not adequately accounted for, and they add to basic value the appraised value of buildings up to the value of an adequate set. Some loan men say that to obtain the loan value on land alone, the value of the buildings must be subtracted from basic value."

D. Howard Doane makes the same statement in an article entitled "Rural Appraising," published in the October, 1934, issue of the JOURNAL.

PLACE OF BUILDINGS IN APPRAISAL IS FUNDAMENTAL

Evidently there is a division of opinion as to how the value of farm land buildings enters into the appraisal. As this is fundamental, it would seem that this subject should be given consideration in the expectation that a full and frank discussion might clarify the situation and a conclusion reached as to the part the buildings on a farm have to do with the appraised value of that farm.

In the appraisal of income-producing property, whether a farm or some other parcel of real estate, when the *net income* is definitely established and the amount of the net income is capitalized direct at the correct rate, the result indicates the value of the entire property from this particular approach, including both land and buildings, and there is nothing to be either added to or subtracted from the appraisal estimate.

To illustrate, a grain farm, rented to a tenant, produces an average net annual income of $900 to the owner for a period of ten years. If the correct capitalization rate is 4½ per cent, the farm has a value by capitalization of net income of ($900÷.045) $20,000. Certainly the buildings have contributed their part to the net earnings, and no amount should be either added to or subtracted from the $20,000 to establish the value of the farm by capitalization of the net income. This principle is so well recognized and so well established in the appraisal of all classes of real estate that it needs no further illustration.

THE THREE APPROACHES

There are three, and only three, approaches to the appraisal estimate of real estate. There is nothing new in the use of the three approaches. The American Institute of Real Estate Appraisers did not originate them. They have been used, not under the name of the "three approaches" but in principle, from time immemorial by every competent real estate broker in closing every real estate sale that required convincing argument and proof of value in order to get the name "on the dotted line." In analyzing the sales proof necessary to close real estate transactions, the Institute recognized that all sales arguments and proofs naturally classify themselves under three approaches, also that any parcel of real estate of whatsoever kind or wheresoever located may be properly appraised by the application of one or the other or, in some instances, all three approaches. The appraisal estimates reached by the application of these three approaches may show a considerable difference in amount during booms or depressions, but there may be little variation, and theoretically perhaps none, during periods of economic stability. If all three approaches are used in the appraisal of any particular piece

of real estate, the value indicated by the approach which most nearly conforms to all the conditions surrounding the parcel of real estate under consideration should be chosen as the appraisal estimate. The values indicated by each of the other approaches are then regarded as checks on the appraisal estimate selected. The three approaches are as follows:

Value of the land plus the cost of reproduction of the buildings new, less depreciation.

Comparable sales of similar property, similarly located, on the open market as between willing buyers and willing sellers. These sales, to be of definite value, should be made within a reasonable time prior to the date of the appraisal of the property under consideration.

Capitalization of net income.

ADJUSTMENTS

Do the so-called "adjustments" as used in connection with the "basic value" appraisal of farm lands for good or poor location, etc. have a place in the appraisal estimate? Each of the three approaches automatically covers the entire field of "adjustments." Certainly the reproduction cost approach covers it when the value of the land is determined; all adjustments for good or poor location, for nuisances, good roads or bad roads, etc. enter into the land value and are there properly discounted.

It is certain that the value by comparative sales covers all adjustments fully and completely; and the rate used in capitalizing the net income is selected and determined after full consideration is given to all items that add to or subtract from the value of the farm.

The following quotation from an address by P. L. Gaddis, Chief Appraiser of the Farm Credit Corporation, Washington, D. C., before the Annual Convention of the American Farm Economic Association in Chicago, December 29, 1936, on "The Appraisal of Farm Lands," appears to support this view:

"To summarize, in making an appraisal, the appraiser will take the following steps: (1) make a study of the unit in its setting, including trends in production, markets, and home uses; (2) make a complete inspection of the property, carefully classifying the land by type, utilization, and production; (3) accurately measure and determine the utility of each building; (4) assign acre values and individual building values; (5) value the unit as a whole; (6) carefully estimate farm income and expenses under present management and under typical operation; (7) check by rate of return to representative owner-operator and landlord; (8) check livestock units with carrying capacity or staple cash-crop farms by productive capacity; (9) check with type farms or other units appraised previously in this and other areas; (10) check with sales prices under different conditions, adjusted for abnormality; (11) check with the opinion of sound and substantial farmers and businessmen of the area; (12) make appropriate allowance in his all-asset value for any nonagricultural features. His report will contain a complete explanation."

It would seem a fair conclusion that this summary could be further summarized into the "three approaches" outlined above as every item included is covered by the three approaches.

AN EXAMPLE

Herewith is presented the appraisal of the Thompson Estate Farm by the three approaches. This is an actual farm; the figures, taken from the books of the manager, cover the past ten years. The appraisal is not complete; only such information is given and such descriptive matter used as are necessary in making the appraisal estimate.

PURPOSE OF THE APPRAISAL

The purpose of this appraisal is to determine the *market value* as of July 1, 1937.

DATA REGARDING THE STATE OF ILLINOIS, THE COUNTY OF KNOX, AND WALNUT GROVE TOWNSHIP

Knox County, in which the farm under consideration is located, is in the northwest portion of the state of Illinois. The county is twenty-four miles wide and thirty miles long and, therefore, contains 720 square miles, or approximately 461,000 acres. Of this acreage, 65.5 per cent was used for crop purposes in 1929 and 30.8 per cent was used for pasture. During this same year, corn was produced on 33.3 per cent of the entire acreage of Knox County. This portion of Illinois receives approximately thirty-four inches of rainfall per year.

Soil: Illinois soils are largely the result of glacial action; this is true of Knox County soils. Fifty-seven per cent of the area of Knox County consists of upland prairie; 14½ per cent of undulating timber lands; 18½ per cent of rough or rolling timber lands; and 10 per cent bottom lands. The highest point in Knox County is 859 feet above sea level and the lowest, 536 feet. More than 50 per cent of Knox County soils are classified by the University of Illinois Agricultural Experiment Station as brown to black silt loam; the remaining portion is made up largely of yellow clay silt loam and bottom lands.

The subsoil permeability of Knox County is classified as moderate. The parent material of Knox County soil is loess more than 100 inches in thickness; this is the best class of soil in the state of Illinois. It is interesting in this connection to note that the largest body of soil of this type is in the central western portion of the state.

Various classifications have been adopted from time to time in connection with the soil types of Illinois. A recent grouping by the Agricultural Experiment Station indicates sixteen groups, based largely upon the color of the surface soil and the character of the subsoil with reference to permeability and lime content. These soil types have been further subdivided until 230 soil types have been described.

Markets: Knox County is well located in regard to markets. It is crossed by the main line of the Chicago, Burlington & Quincy Railroad and by the main line of the Atchison, Topeka & Santa Fe Railroad; in addition, the Chicago, Burlington & Quincy Railroad has branch lines extending in all directions out of Galesburg, the county seat. Accordingly, Knox County has easy access to markets for farm products, the principal market being Chicago, with considerable shipping of both grain and livestock to Peoria and occasional shipping to Kansas City, St. Paul, and St. Louis, when market conditions are such as to make returns satisfactory in the markets named.

On the whole, it may be said that Knox County from an agricultural standpoint, including location with regard to markets, soil conditions, conditions conducive to the growing of all crops produced in central and northern Illinois, and favorable conditions for the growth of livestock, ranks with the best counties in the state.

According to the Federal Census Report, there were 214,497 farms in Illinois as of April 1, 1930. Knox County had 2,560 farms with 418,618 acres in cultivation.

Walnut Grove Township: Walnut Grove Township, in which is located the Thompson Estate Farm, was reported by the Federal Census of 1930 to contain 136 farms, totaling 22,733 acres. The total value of farm land and buildings was reported at $3,522,200, of which $950,806 represented the value of the buildings, or 27 per cent.

Walnut Grove Township is one of the best townships in Knox County from the standpoint of agriculture. The soil, generally, consists of brown silt loam. The land is slightly rolling. Farms, for the most part, are well improved, with the buildings in good condition. The majority of the farmers are of Swedish descent. They are industrious and of the best type of American citizens. The township has a well-established record for the production of good crops and good grades of livestock, and, accordingly, the farms are in demand.

THE THOMPSON ESTATE FARM

The Thompson Estate Farm contains 160 acres and is located one and one half miles north of Altona, Illinois, on "U. S. Route No. 34."

Improvements (Fair):

House built in 1874; has been well cared for and is in good condition.
Barn; old bank barn; in fair condition only.
Cattle shed, double corncrib, hog house, and machine shed are of proper size and in good condition.
Garage and other outbuildings are in satisfactory condition.
All fences are hog-tight, woven wire or hedge.
Two good wells, one at the house and one at the barn.
There is a good deal of tile on the farm, some too small; 200 rods of 4-inch tile should be laid in the northwest 40 acres.

Soil:

10 acres permanent pasture—rolling.
8 acres in lots.
20 acres rolling plow land—some clay points.
122 acres brown silt loam—best type Knox County soil.

Rotation of crops:

Corn—corn—oats—clover and timothy.

Lime and phosphate:

A large number of cattle and hogs have been fed on the farm for many years. The natural manure has been distributed from year to year. This has aided materially in maintaining the fertility of the soil. Soil tests show that the phosphate content is satisfactory, but the soil needs lime stone.

Rental:

Rental is upon a one-half basis, delivered in elevator; $5.00 per acre for grass; clover and other grass seed, ½ and ½.
Present tenant has farmed this farm for five years and is a satisfactory tenant.
Farm listed for sale at $145.00 per acre.

VALUE OF LAND PLUS REPRODUCTION COST OF BUILDINGS NEW, LESS DEPRECIATION

Land

N.W. 40 acres	@	$140.00–$5,600.00	
S.W. 40 acres	@	120.00– 4,800.00	
N.E. 40 acres—			
10 acres	@	75.00– 750.00	
30 acres	@	140.00– 4,200.00	
S.E. 40 acres—			
10 acres (lots)	@	75.00– 750.00	
10 acres (rolling farm land)	@	75.00– 750.00	
20 acres	@	120.00– 2,400.00	
			$19,250.00

Improvements:

House

Two-story, 9-room and basement; hot air furnace; no bath, plumbing, nor electric light; built in 1874; has been well cared for and is in good condition

Main part 18′x30′ with "L" 16′ x24′, contains 924 sq. ft.; cost of construction new in 1937—$4.50 per sq. ft., or $4.50 × 924 = ...$4,158.00

One third of the useful life of the house is ahead of it; therefore, its sound value is 1/3 of $4,158.00 or $1,386.00

Barn

"L"-shaped bank barn, main part 36′x44′, "L" 20′x32′, contains 2,224 sq. ft.; cost of construction new in 1937—$1.50 per sq. ft., or $1.50 × 2,224=$3,336.00

One third of the useful life of the barn is ahead of it; therefore, its sound value is 1/3 of $3,336.00 or 1,112.00

(Query: How does obsolescence affect the value of a good horse barn on a farm which is now farmed with tractors instead of horses and mules?)

Corncrib

Double; in good condition; 27′x36′, contains 972 sq. ft.; cost of construction new in 1937—$.75 per sq. ft., or $.75×972=$729.00

This corncrib is three fourths sound; therefore, its sound value is ¾ of $729.00 or..... 546.00

Hog House

Ordinary construction but in good condition; 20′x36′, contains 720 sq. ft.; cost of construction new in 1937—$.50 per sq. ft., or $.50 × 720 = ...$360.00

This hog house is three fourths sound; therefore, its sound value is ¾ of $360.00 or..... 270.00

Feeding Platforms

Two; both in good condition; 20′ x36′ or 720 sq. ft.; 12′x36′ or 432 sq. ft.; total sq. ft. 1,152; cost of construction new in 1937—$.20 per sq. ft. or $.20 × 1,152 = ...$230.40

Sound value—¾ of $230.40 or.... 172.00

Garage

Double; old but in fair condition; 20′x24′, contains 480 sq. ft.; Sound Value 100.00

Machine Shed

16′x32′, contains 512 sq. ft.; cost of construction new in 1937—$.75 per sq. ft. or $.75 × 512 = ...$384.00

Sound Value—2/3 of $384.00 or 256.00

Cattle Barn

Built in 1913; good foundation; building in good condition; dirt floor; 54′x60′, contains 3,240 sq. ft.; cost of construction new in 1937—$.60 per sq. ft. or $.60 × 3,240 = ...$1,944.00

This cattle barn is 50 per cent sound; therefore, its sound value is ½ of $1,944.00 or..... 972.00

Chicken house, tool shed, two old corncribs, and other minor improvements at a nominal value of 100.00

Total Sound Value..... $4,914.00

Total value as indicated by the land value plus the cost of reproduction of buildings new, less depreciation $24,164.00

Percentage of value of improvements compared with the value of the entire farm—
$4,914.00÷$24,164.00=20%

Note: Practically all land in the vicinity of the Thompson Estate Farm is improved. Accordingly, no sales of unimproved land *near* this farm are available for purposes of comparison.

(For sales of unimproved land in this district, see page 46.)

The appraisal of farm land in a neighborhood where practically all land is improved upon the basis of the value of the land plus the cost of reproduction of buildings new, less depreciation, is not the approach which typically determines the value estimate in actual practice as the value of the land must be determined by comparisons

with improved farm lands, and this cannot be done with accuracy. This approach will generally set the high limit of value of farm lands, as it does with all other classes of real estate, and is of value as it includes an analysis of each improvement separately with sound values assigned to each improvement, a detailed description of each tract of land with values assigned separately, and the total value of the farm. This approach is valuable from the standpoint of comparison with the other two approaches.

RECENT COMPARABLE SALES

Farms with improvements

No. 1—2½ miles from Alpha gravel road; poor improvements; all good land	160 acres	$155.00
No. 2—3½ miles from Roseville; poor improvements; poor fences; extra good soil	240 acres	160.00
No. 3—5 miles northwest of Galesburg on dirt road; ½ mile from gravel road; well improved; all good land	156 acres	172.00
No. 4—Adjoins Cameron (village); good house; no barn (burned); all good land	160 acres	180.00
No. 5—1 mile north of Berwick; good land; good improvements	160 acres	173.00
No. 6—½ mile east of Henderson; fair improvements; all black land; needs tile	172 acres	145.00
No. 7—1½ miles north and ¾ mile east of Altona; well improved; good fences; 140 acres of good land; 20 acres pasture land; sold in May, 1937; this farm is within 2 miles of the Thompson Estate Farm but is located on a side road	160 acres	160.00
No. 8—4 miles southwest of Galesburg on gravel road; poor improvements; top land; needs tile	160 acres	137.50

Unimproved farms

No. 9—Corners with above farm (No. 8); needs tile	305 acres	132.00
No. 10—3½ miles south of North Henderson; good black land; well tiled	80 acres	125.00
No. 11—3 miles east and 1 mile south of Rio; land slightly rolling	80 acres	110.00

Many other similar farms have been sold in this section of Illinois at about the same prices as quoted above.

A comparison of the value of the Thompson Estate Farm, including all items that enter into the market value, with the actual sales of farms listed above indicates that the market value of this farm as of July 1, 1937, was $140.00 per acre, or $22,400.00

Generally, farms of this type are purchased on the market value as determined by comparative sales where there are enough sales of comparable farms to establish a market value.

CAPITALIZATION OF NET INCOME

Statement of Income and Expense in re:
Thompson Estate Farm
1½ miles north of Altona, Illinois,
July 1, 1937

Actual receipts and disbursements of this farm for 10 years (1927 to 1937) as shown by the manager's books:

1928 Receipts—1927 Crop

Cash rent			$ 180.00
646 bu. oats	@	.31	200.26
134 bu. oats	@	.34	45.56
303 bu. corn	@	.61	184.83
1,320 bu. corn	@	.72	950.40
516 bu. oats	@	.50	258.00
Gross receipts			$1,819.05

Disbursements

200 hedge posts	$100.00	
Nails, wire, and lumber	91.16	
Repair to house	56.66	
Timothy seed	16.50	
2 cement tanks	67.02	
Shelling corn	32.20	
Taxes	209.79	
Insurance—hail and fire	40.30	
Management	50.00	
Total disbursements		$663.63
Net income		$1,155.42

1929 Receipts—1928 Crop

Cash rent—1928			$ 171.00
Cash rent—1929			234.00
1,668 bu. corn	@	.96½	1,609.62
924 bu. oats	@	.40	369.60
Gross receipts			$2,384.22

Disbursements

Clover and timothy seed	$ 78.44	
Repairs and lumber	135.84	
Shelling corn	33.37	
Insurance—hail and fire	42.05	
Ad in *Register-Mail*	2.34	
Taxes—1928	189.95	
Taxes—1929	201.02	
Management	50.00	
Total disbursements		$733.01
Net income		$1,651.21

1930 Receipts—1929 Crop

Cash rent			$ 194.72
1,379½ bu. corn	@	.72	993.24
779 bu. oats	@	.34	264.86
941 bu. oats	@	.22	207.02
Gross receipts			$1,659.84

Disbursements

Posts, lumber, wire, and repairs	$162.02
Clover seed	31.75
Shelling corn	27.58
Insurance—hail and fire	57.72
Taxes	206.08
Management	50.00
Total disbursements	$535.15
Net income	$1,124.69

1930—1931—1932 Crops

Cash rents			$ 417.00
980 bu. oats	@	.38	372.40
4,763 bu. corn	@	.51	2,429.13
738 bu. oats	@	.18	132.84
Gross receipts			$3,351.37

Disbursements

Fence and repairs	$191.22
Clover, timothy, bean, and rye seed	35.95
Delivering oats and corn	105.05
Insurance—hail and fire	52.10
Taxes—2 years	383.29
Management	50.00
Tax on checks	.14
Total disbursements	$817.75
Net income	$2,533.62

1933 Crop Receipts

Cash rent			$ 230.00
196 bu. barley	@	.58	113.68
97 bu. oats	@	.40	38.80
1,650 bu. corn	@	.72	1,188.00
Gross receipts			$1,570.48

Disbursements

107 hedge posts	$ 26.75
Fences—nails, lumber, and repairs	37.44
Shelling corn	24.75
Insurance	8.05
Taxes	129.11
Management	50.00
Tax on checks	.32
Total disbursements	$276.42
Net income	$1,294.06

1934 Crop Receipts

First Government check			$ 51.75
Cash rent			195.00
923 bu. corn	@	.71	655.33
Gross receipts			$ 902.08

Disbursements

Creosote oil	$ 11.32
Lumber, wire, nails, and repairs	79.39
Shelling corn	14.72
Insurance	16.10
Taxes	157.61
Management	25.00
Tax on checks	.04
Total disbursements	$304.18
Net income	$ 597.90

1935 Crop Receipts

Second Government check			$ 31.51
Cash rent			182.50
159½ bu. beans	@	.70	111.65
2,570 bu. corn	@	.63½	1,631.95
Gross receipts			$1,957.61

Disbursements

Bean, corn, timothy, and clover seed	$ 79.46
Repairs	3.50
Combining beans	29.25
Shelling corn	37.71
Insurance	8.05
Taxes	212.33
Management	25.00
Total disbursements	$395.30
Net income	$1,562.31

1936 Crop Receipts

Cash rent			$ 120.00
934½ bu. corn	@	1.06	990.57
299 bu. oats	@	.50	149.50
Gross receipts			$1,260.07

Disbursements

Shelling corn	$ 19.66
Carpenter labor, repairs to buildings	85.50
Houghton Lumber Company	135.25
Clover and timothy seed for 20 acres	67.08
Insurance	8.05

Taxes	203.97
Management	50.00
Total disbursements	$569.51
Net income	$ 690.56

Summary:

Year	Gross	Operating Expenses	Net
1927	$ 1,819.05	$ 663.63	$ 1,155.42
1928	2,384.22	733.01	1,651.21
1929	1,659.84	535.15	1,124.69
1930 —'31-'32	3,351.37	817.75	2,533.62
1933	1,570.48	276.42	1,294.06
1934	902.08	304.18	597.90
1935	1,957.61	395.30	1,562.31
1936	1,260.07	569.51	690.56
	$14,904.72	$4,294.95	$10,609.77
Bank Balance			196.27
			$10,806.04
Average per year	$ 1,490.47	$ 429.49	$ 1,080.60

Sale price of grain:

1927 Crop	Corn	@	.61 — .72
	Oats	@	.31 — .34 — .50
1928 Crop	Corn	@	.96½
	Oats	@	.40
1929 Crop	Corn	@	.72
	Oats	@	.22 — .34
1930 Crop, 1931 Crop, 1932 Crop	Corn	@	.51
	Oats	@	.18 — .38
1933 Crop	Corn	@	.72
	Oats	@	.40
	Barley	@	.58
1934 Crop	Corn	@	.71
1935 Crop	Corn	@	.63½
	Beans	@	.70
1936 Crop	Corn	@	1.06
	Oats	@	.50

Corn—Average price per bushel	$ .74
Oats—Average price per bushel	.36
Gross Income to Owner—Average per acre per year	$9.32
Net Income to Owner—Average per acre per year	$6.76
Average operating expense per acre per year (actual)	$2.56
Percentage of operating expense to gross income — $2.56 ÷ $9.32 = (as shown by books)	27%+
Reconstructed average operating expense account—Gross income average, 10 years, $1,490.47, or per acre	$9.32
Average operating expense (reconstructed) $592.00, or per acre	$3.70
Percentage of operating expense to gross income (average 10 years) (reconstructed account) $3.70 ÷ $9.32 =	39%+
Average Gross Income per year	$1,490.47

Reconstructed Annual Operating Expense Statement—

Taxes		$200.00
Insurance on buildings		
Policy carried with the Knox County Mutual Insurance Company; fire and lightning and windstorm and hail; rates combined amount to about $.20 per hundred per year, plus $2.00 renewal fee on a five-year policy. The actual amount paid for insurance on buildings for the years 1933, 1934, 1935, and 1936 averaged $10.06.		
Insurance estimated at	12.00	
Upkeep	50.00	
Depreciation—2% on $5,000	100.00	
Management—$1.00 per acre	160.00	
(Query: Assume the buyer makes the farm his home and operates it himself; does this eliminate the $160 annual management charge? If so, what effect does this have on the value of the farm to owner-operator?)		
Shelling corn	30.00	
Clover seed and miscellaneous items (½ furnished by tenant, ½ by owner)	40.00	
		592.00
Net Income		$ 898.47

$898.47 capitalized at 4¼% indicates value of $21,140.00

RECAPITULATION OF VALUES BY THE THREE APPROACHES

Based upon land value plus reproduction cost of buildings, less depreciation (disregarding odd dollars)	$24,000.00
Based upon comparable sales (160 acres @ $140.00)	$22,400.00
Based upon capitalization of net income—$898.47 (average net for 10 years) capitalized @ 4¼% indicates a value of $21,140.00 (disregarding odd dollars)	$21,000.00
Farm listed for sale at $145.00 per acre, or	$23,200.00

CONCLUSIONS

The *market value* of the Thompson Estate Farm as of July 1, 1937, was.....$22,400.00.

This value is based upon recent comparable sales of similar farms similarly located.

The approach by comparable sales is selected because it conforms in all particulars to the conditions affecting the market value of the farm.

Full consideration was given to the reproduction cost approach, which contributed some interesting information of value to the owner of the farm and to prospective purchasers; as is usual, this approach set the high limit of value on the farm and was disregarded as not determining correctly the market value.

The capitalization of the average net income over a period of ten years at 4¼ per cent produced a value about $1,400 lower than the market value as determined by comparable sales. This is usual and to be expected in this type of farm, as either the desire or the necessity of having a farm home, ever since men began to buy farms for homes and to operate them themselves, has constantly put the market value by comparable sales higher than the value determined by the capitalization of net income.

Based upon an experience of more than twenty-five years in the real estate business, with more than fifteen years specializing in buying and selling farm lands in various parts of the United States and Canada, it is the opinion of the writer that farm lands generally sell upon the basis of comparable sales of similar farms similarly located. "The proof of the pudding is in the eating." Take a prospective purchaser out at the present time or at any other time in the future to select a farm; he will give consideration to the location, the attractiveness, and the sound value of the buildings, plus the land value, which includes soil condition, and he will give consideration to the earning ability of the farms inspected and to capitalization of net income, as well as to all other items which enter into value, but when the prospect is ready to buy, the purchase will be made as he judges the value, based upon comparable sales of similar farms similarly located.

Fluctuations In Housing Construction*

By GEORGE TERBORGH

CERTAIN difficulties beset a discussion of housing, or anything else connected with real estate, in terms of national averages and totals. There is no national housing market comparable with the market for securities or commodities, since housing is, in the nature of the case, a local utility dependent upon local demand. That it can be discussed at all in national terms is because of the fact that housing markets, though local, are not economically isolated but on the contrary respond similarly in the great majority of cases to general economic developments such as war, inflation, depression, and recovery. It must be kept in mind, however, that descriptive generalizations for the country as a whole can do no more than reflect the preponderant movement or condition, ignoring the exceptions which are invariably present.

One or two further introductory explanations are in order. The discussion which follows relates exclusively to nonfarm housing. The adjective "nonfarm" will not be constantly reiterated, it being understood that both the text and the statistics imply this limitation throughout. Secondly, the figures cited are almost without exception estimates and are to be read as such.

IMPORTANCE OF HOUSING

There can be no question that we have in housing one of the most important of all durable goods. Expenditures for new construction and repairs in this field averaged nearly five billion dollars annually during the residential building boom of 1923-1928, a figure which represents roughly 35 per cent of the total for consumers' durable goods and 15 per cent of the total for all durable goods in the same period. While the relative importance of housing over a long period is somewhat less (these percentages averaged twenty-nine and twelve, respectively, over the past eighteen years), it remains even upon this basis a major component of the durable goods output.

The significance of residential construction from the standpoint of business fluctuations is greater than these relative magnitudes suggest, since it is subject to swings in activity more extreme than those which characterize the output of durable goods as a whole. During the low year of the depression, house building and repair operations were only 15 per cent of the previous high, as contrasted with 45 per cent for the output of all other durable goods.

THE CONSEQUENCE OF DURABILITY

One reason for the extreme amplitude of fluctuation in housing activity is the extraordinary durability of the product. New dwellings have an average life expectancy of somewhere between fifty and one hundred years. Since the supply of residential structures in use in this country has been expanding continually since the beginning, a comparatively small fraction of the present stock is of advanced age (only 8 per cent of the housing in sixty-four cities covered by the Real Property Inventory in 1933 was over fifty years old), and the volume of old-age retirements is therefore relatively insignificant. The annual demolition and wreckage from all causes, including wind, fire, and flood, have averaged in recent years much less than one half of 1 per cent of the amount of housing in use. This means that even with a complete suspension of new construction the existing supply of facilities contracts at an almost imperceptible rate, making possible a practically undiminished total consumption for several years.

*An address by Mr. Terborgh on September 29, 1937, at a meeting of the Cyclical Variations Section, Subcommittee on Research and Statistics, Central Housing Committee, Washington, D. C.

There is another consequence of this extreme durability that should be noted. Since replacement demand is so insignificant, the market for new housing depends chiefly upon a continued expansion in residential occupancy. (In the twenties, replacement accounted for about 10 per cent of the new construction.) During the past eighteen years, for which estimates are available, the growth of nonfarm occupancy in the United States averaged 2.0 per cent annually, but there were two years (1931 and 1932) when there was an actual shrinkage and one year (1923) when the growth was as high as 4.4 per cent, or more than twice the period average. Fluctuations in total volume of occupancy are relatively small, but fluctuations in the rate at which this volume grows are large. Since it is the rate of growth which controls the volume of new building activity (except for the comparatively insignificant replacement demand), construction tends to display a responsive instability.

TIMING OF MOVEMENTS

A review of housing construction since 1919 shows a movement with turning points differing quite widely from those recorded by most types of durable goods production and by business activity in general. Thus, the trend in residential building turned downward in the middle of 1919, a year ahead of the break in business, and began rising early in 1921, several months ahead of the general recovery. Its next downturn came late in 1925, four years ahead of general recession, and the succeeding upturn appeared about the beginning of 1935, almost two years after the business revival set in. It is apparent that housing construction has been in an exceptional degree a law unto itself.

This is due not only to the fact that the demand for new housing moves in cycles differing from those which characterize most goods, but also to the fact that readjustments of supply to demand in this field proceed so slowly and with such inertia that they are likely to overcompensate and to give rise to swings in production that are at times out of phase with the swings of business in general.

Maladjustments of supply and demand in housing, as evidenced by an excess or deficiency of vacant dwellings, affect the output of new units largely in an indirect manner through their effect on the rents and values of existing properties. Readjustments in sale and rental values are generally sluggish. Not only do rates on new leases respond with considerable inertia to changes in vacancy situations, but, because of the fact that most rental contracts run for a year at a fixed return, the average rates actually being paid and received lag well behind new lease rates.[1] As for movements in the selling prices of residential properties, these require typically a period of incubation before they gather force and velocity. Readjustments in both rents and values, therefore, can lag so far behind changes in vacancy situations that housing surpluses or shortages accumulate before new construction is sufficiently curtailed or stimulated, as the case may be, to check the accumulation.

THE PREVIOUS BUILDING BOOM

The World War occasioned a drastic curtailment of residential building, the volume for 1917 and 1918 combined being only a little over one half of that for the two preceding years. Housing shortages, which were confined during the period of hostilities largely to special war situations, became fairly general with demobilization of the military forces, and under the stimulus of rising rents and residential property values, a sharp recovery in construction developed. This was cut short after a few months by the skyrocketing of building costs.[2] After the middle of

[1] This lag is aggravated in upward movements by the tendency of renewal rates to advance more slowly than rates on new contracts.

[2] A decline in the availability of mortgage money should be mentioned. It appears from fragmentary data that building money became decidedly scarce, partly because of rising long-term money rates generally but chiefly because lenders became increasingly distrustful of the permanence of the high construction costs then prevalent.

1919, activity dropped as rapidly as it had previously risen. As a result, the year 1920 saw a housing output comparable with the low level of 1917 and 1918.

The collapse of commodity prices in the fall of 1920 brought a marked reduction in building costs. Thus facilitated, and furthered by advancing rents and values for existing residential structures, construction revived again in 1921, but by that time the housing shortage had become acute. The general business recovery which followed the depression of that year was accompanied by an exceptionally rapid growth in nonfarm residential occupancy, so that despite a truly spectacular upswing in residential construction, no significant general alleviation of the housing shortage was achieved until 1924.[3] By that time rental and sale values for existing residential property had reached so high a level that the incentive to build was intense, and construction activity was of boom proportions.

After 1923 there was a fairly steady decline in the annual growth of nonfarm occupancy. From a high of 830,000 dwelling units in that year, it receded to a level of about 450,000 in 1928 and 1929. So intense was the building incentive developed by the prolonged housing shortage, however, and so great was the momentum of the boom, that construction mounted until 1925. Because of the decline in the growth of occupancy, this high level of output resulted in a rapid accumulation of vacancies in the existing supply of housing. While building activity receded slightly after 1925, it did not decline sufficiently in the next three years to prevent the continuance of this accumulation. By 1928, vacancies had reached a high level.

The slowness of this recession in building activity is worthy of particular notice. While the rise in vacancies, which began in 1924, was followed after a few months by a decline in rental rates on new leases, it was a couple of years before this produced any significant decline in the average rate on all leases outstanding, and it was at least as long before there was any marked softening of residential property values. By the time these declining tendencies appeared, the profit margins per unit obtained generally by contractors and developers had become so wide (a consequence, of course, of the prolonged housing shortage) that they could be narrowed materially with but little effect on the volume of construction. By this time also, the building boom had developed lender confidence, not to mention new financing expedients such as real estate bonds, so that the availability of construction loans was actually increasing during the period when an excessive vacancy supply was being accumulated. Notwithstanding the fact, therefore, that the contractors' construction costs did not decline significantly, sales of new housing were fairly well maintained for two or three years in the face of falling rents and values for existing properties by a more or less continuous shrinkage of the unit profit margins of the producers of housing and by the aid of thinner equities demanded of buyers.[4]

This process obviously could not go on forever. The weight of the growing volume of vacancies accelerated the cheapening of existing residential facilities competitive with new construction, while a further chiseling of profit margins by contractors and developers became less and less compatible with the maintenance of the former rate of activity. As the prices required to move new housing declined, more and more situations developed in which construction was curtailed or suspended. A critical stage in the process was reached in 1929. Partly because of a tightening of the mortgage market then under way, but chiefly because of overbuilding, construction activ-

[3] The unusually rapid expansion of nonfarm occupancy in 1922 and 1923 may be laid to the following factors: (1) heavy net migration from farms to cities, towns, and villages; (2) heavy immigration from foreign countries; (3) high marriage rates; (4) undoubling of families forced to share living accommodations during the war and subsequent depression.

[4] The ability of producers to sell new housing at declining prices was probably increased somewhat during this period by a softening of the prices of vacant land.

ity in the residential field entered an acute slump. This, incidentally, was in full swing before the break in the general economic situation in the fall of the year.

The decade of the twenties thus presents an interesting and instructive example of the course of a building boom. Generated by an acute housing shortage, the boom gathered a momentum which carried it along until a surplus had accumulated. The impact of this surplus eventually sent building activity into a tailspin.

Had the general economic situation remained strong after 1929, a moderate period of curtailed housing output might have absorbed excess vacancies and rectified the situation, but this corrective process had hardly begun when the slump in business supervened. To the depression, the weakness in the housing situation was a serious aggravation, while the reflex effect of the depression on housing was to make a bad situation worse.

HOUSING DURING THE DEPRESSION

The most important effect of the depression on housing was to suspend for several years the growth in occupancy on which, as we have seen, most of the demand for new construction depends. Because of the migration of population from urban communities to farms, the cessation of new immigration from abroad, the curtailment in the number of marriages, and the doubling up of families on account of reduced incomes, the total of nonfarm occupancy actually declined during the worst part of the depression and remained below the 1929 figure until 1934. Even now it exceeds 1929 by only 1,800,000 to 2,000,000 dwelling units, as compared with a gain of at least 3,500,000 units to be expected except for the depression.

This increase in the present occupancy over 1929 has been accommodated in part by a growth in the housing supply in the interval, which, despite the drastic curtailment of building, has amounted to about 1,100,000 dwelling units. In part, it has been accommodated by an absorption of some of the large supply vacancies existing at the beginning of the period. Although the number of vacant units increased from 1929 to 1932 by something like 650,000, the reduction since then has been nearly twice as great. At the present time the supply is about 500,000 dwelling units below the level indicated by a long-term average vacancy ratio.

The decrease in vacancies which began in 1933 was followed early in 1934 by an upturn in rental rates on new leases. It was at least a year later, however, before there was any significant advance in the average of rents on outstanding leases or in property values. New construction did not begin to revive before 1935. The tendency for building to give a delayed reaction to vacancy situations has been evidenced again in this movement. The housing shortage, as measured by the supply of vacancies, was much more acute in 1937 than in 1925, when 940,000 dwelling units were produced, yet the 1937 output will be only about one third of that amount. Realignments in rents and values have clearly not proceeded fast enough to keep building in step with the growth of occupancy. Just as in the twenties when we passed from a shortage to a surplus of housing because of the delayed response of building to the underlying supply and demand situation, we have already passed in the thirties from a surplus to a shortage and for the same reason.

BUILDING PROSPECTS DURING THE NEXT FIVE YEARS [1938-1942]

Without going into the questions of method and procedure, I shall merely summarize the results of an analysis of the probable housing market during the next five years. *The estimates are based upon the assumption that the period will be prosperous:*

COMPONENTS OF THE FIVE-YEAR HOUSING MARKET

1. Increase in households:
   (a) From currently accruing natural in-

crease	2,400,000	
(b) From reduction of the depression marriage backlog	200,000	
(c) From undoubling of families	200,000	
(d) From net reduction in farm households	200,000	
Total increase in households		3,000,000
2. Replacement of dwelling units demolished during the period		400,000
3. Elimination of present housing shortage		500,000
Total housing market in dwelling units		3,900,000
Average market per year		780,000

The prospect may be summarized a little more fully in three propositions: (1) If building averages around 800,000 units a year for the next five years, the period should close with a reasonably comfortable housing situation; (2) If construction averages 700,000 units annually, the period should close with a shortage comparable in magnitude with the present shortage; (3) If the average is 600,000 units, the shortage at the end of the period promises to be very acute, comparable, let us say, with the worst period after the World War.

In view of the fact that the five-year period starts at a relatively low level of construction (perhaps 320,000 units in 1937), the attainment of a rate of 800,000 units a year cannot be expected until we are well into the period, and the achievement of that rate as an average for the period as a whole, therefore, would call for an output of at least a million units a year in its later stages. While this is not impossible (it is less than 10 per cent higher than the 1925 peak), it seems to me doubtful that it will come soon enough, if it comes at all, to produce an average of 800,000 for the five years. The inference is, therefore, that there will be some housing shortage remaining at the end of the period.

One reason for this doubt is the danger that as construction activity increases, there will develop shortages of skilled labor and of certain classes of building materials that will retard further expansion. Such a limitation of the output of new housing, if it becomes effective, will be reflected partly in higher labor and material costs and in some cases in higher unit profit margins for contractors and developers, but in any event the final cost of the product to buyers will tend to rise sufficiently to equate demand with the limited supply being produced.[5] It may require prices for new housing materially higher than those now prevailing to mobilize enough productive activity to offset demolitions and occupancy expansion during the next few years, to say nothing of eliminating the shortage now existing. I am inclined to believe that, barring unexpected developments in prefabrication, government subsidies, or other alleviatives of the situation, supply and demand will be equated during the next five years (if the period is prosperous) by a volume of construction which averages between 600,000 and 700,000 dwelling units a year. This would represent an average expenditure at predepression building cost levels (including repair activity) of four to four and one half billions of dollars annually. Higher cost levels, of course, would increase this figure.

There seems no doubt, in any event, that the current housing shortage will become considerably worse before it begins to be generally alleviated. Even with the most rapid pickup in construction for which we have any reason to hope, the prospect is for a worsening of the situation for at least a year. The shortage seems destined to become decidedly acute in many places during this stage. The attainment of reasonably comfortable

[5]This says nothing of increases in labor costs due to trade union activity. These may have little relation to the magnitude of existing labor shortage. The rapid rise in building costs in the winter of 1936 and the spring of 1937 appears to be due primarily to sharp advances in wage rates both in the industries fabricating materials and in actual construction. These increases are only partially explainable by reference to labor shortages. Needless to say, what has happened once may happen again.

housing conditions is, of course, much more remote than the beginning of improvement since progress will at first be slow.

MORE REMOTE PROSPECTS

If the next few years are prosperous, the housing market will experience an exceptional concentration of demand. Superimposed upon the regular demand arising from the currently accruing natural increase in households and the replacement of structures currently demolished will be a special and temporary demand attributable to the aftereffects of the depression. This special demand appears to total something like 1,100,000 dwelling units, as follows:

Accumulated housing shortage at the end of 1937	500,000
Delayed marriages likely to be contracted in the future	200,000
Probable undoubling of families still doubled because of the depression	200,000
Probable net decrease in farm families[6]	200,000
Total	1,100,000

If, as seems probable, these special demands will become effective during the first few years of prosperity, the building of housing will be stimulated to a level that cannot be maintained once they have been satisfied. The regular demand thereafter, barring an unprecedented increase in demolitions and replacements, will probably be around 600,000 dwelling units a year. If, during the period when general and special demands operate concurrently, construction activity is stepped up to, say, one million units a year, a subsequent letdown will be inevitable.

Historical analogies are seldom close, and no one can rightly be very confident of inferences drawn from earlier situations. However, it seems to me that there is enough similarity between conditions prevailing at the beginning of the last building boom and those obtaining today to justify a tentative expectation that the forthcoming boom will repeat, in a general way, the pattern of the preceding one.

If this expectation is justified, we may look forward to a protracted housing shortage accompanied by rising rents and values, with the latter culminating at very high levels when building activity overtakes the current growth in occupancy (plus demolitions). By that time, construction costs will be high, along with land values and contractor-developer profit margins, and the momentum of the building boom will carry it forward despite a decline in the growth of occupancy and the accumulation of vacancies. By that time also, lenders will be full of confidence. The most liberal loans will be made at the top of the market or even during the early stages of the recession in values. The sale of new housing will be supported against the growing competition of existing structures by a narrowing of the wide profit margins previously obtained by contractors and developers and by excessive credit. In the end, the process will enter its critical stage when new housing can be sold only at prices which severely restrict output and when lenders become disturbed by the adverse trend of developments. A fairly abrupt contraction of activity will then ensue.

This pattern of developments is not presented as a definite forecast but merely as a basis for orienting our expectations at the moment. Constant rechecking and revision of these expectations will be necessary as time goes on. It is quite possible that some of the incipient developments of the current housing situation, such as prefabrication and mass production or government leadership in the mortgage market, may later become sufficiently controlling to alter the pattern or that the course of business activity in general may provide a background for housing construction so different from that of the twenties that a radically modified pattern may result. Just now, however, I see no

[6] There is no satisfactory way of estimating this item. The assumption here is that the net decrease in farm families during the next few years will be one half of the increase attributable to the depression. This seems a conservative supposition.

reason to reject the pattern of the preceding housing boom as a tentative guide to the future.

It is one thing to prevent the development of housing surpluses and quite another to stabilize the volume of residential construction. Even if it were possible to tie construction activity closely to the current growth in occupancy (plus current replacements), we should still have building booms and depressions. The growth of occupancy, as we have seen, is extremely irregular and promises to remain so as long as the economy is subject to periodic business depressions. The prevention of a housing surplus several years hence—which is about the most that we can even hope for from regulatory control—will not prevent a boom and recession in the meantime. It can only make the recession prompt, gradual, and orderly.

Economic Life in the Valuation Procedure

By RICHARD U. RATCLIFF

ESTIMATING the remaining economic life of an improved property is generally accepted as an essential step in its appraisal by the income method. To hold that this step is unnecessary may smack of heresy. However, it can be demonstrated that by means of a refinement of the generally accepted method, a value can be determined without requiring an estimate of economic life. It must be admitted that the fewer the number of estimates which must be made in the valuation process, the sounder is likely to be the value which evolves. Thus, a plan which eliminates the need for one such estimate may be worthy of serious consideration.

In a conventional income appraisal of a new property, for example, the basic predictions which must be made are the estimates of (1) revenue, (2) expenses, (3) the length of economic life, and (4) either the value of the land (which is generally assumed to be the same at the beginning and at the end of economic life) or the cost of the building (which is generally assumed to be worthless at the end of economic life and thus to represent by its original cost the loss in value of the project during its life). It is the intention of this article to demonstrate that in fact economic life is determined by the relationships over a period of time between the remaining estimated factors, i.e., the trend of revenues, of expenses, and the value of the property in some other use, or the loss in value during the life of the property. To use a hypothetical illustration—if we assume that at the end of the life of a certain project, the land and improvements will have no value at all, then the economic life of the project ends when expenses exceed revenue. Or, in another case, if we are able to estimate that when the improvements have lived out their usefulness, they can be demolished and the land used for agricultural purposes giving rise to a value of $500 per acre, then the economic life of the original project comes to an end when its net revenue (after deducting expenses) is not sufficient to yield a reasonable return on the land at $500 per acre. In both of these examples, it is clear that the economic life is a function of the relationships between factors which must be estimated and predicted under any income valuation procedure. Economic life, then, is a derivative of the valuation process. It can be determined mathematically from the basic estimates which are essential factors. Its determination is not necessary to the valuation procedure, but it may serve to check the validity of the other estimates of which it is a function.

Before setting out to demonstrate more fully the validity of the thesis briefly outlined above, it is necessary to clarify certain appraisal concepts and to establish certain principles which have failed to receive sufficient emphasis in some of the literature of income appraisal.

TERMINAL VALUE AND SHRINKAGE IN VALUE

Appraisal literature is full of such phrases as "income allocated to building," "residual income to land," "building returns," and "income attributable to land." In some discussions of appraisal theory and in the specific procedures which are presented, it is customary to refer to land and building as the two central elements. As demonstrated in their writings, the leading proponents of income appraisal recognize the true significance of these two central elements. However, because of methods sometimes employed in presenting appraisal techniques and because of the misleading use of the terms "land" and "building," there is some danger of misinterpretations which lead to certain erroneous implications.

Some of the misleading implications which may arise from the loose use of the term "land" and "building" are as follows:

1. There is the possibility of assuming that after deducting that portion of income which is to be allocated to the building, the remaining income represents a perpetual return on the present value of the land and that this present value of the land remains unchanged during the life of the project.
2. There is an allied implication that the only change in the value of the project which can occur is with respect to the building and that this change must always be in the nature of a complete depletion in the value of the improvements during their economic life.
3. There is the suggestion that the total value of the project to be appraised is determined by adding the present value of the building and the present value of the land, one of which has been determined by the allocation of a residual portion of the income stream.

The following discussion will attempt to clarify the distinctions between "land" and "terminal value" and between "building" and "shrinkage in value," differentiations not sufficiently emphasized in most of the literature of appraisal. At the risk of restating a number of familiar principles of valuation, it will be necessary to present the basic reasoning which justifies these distinctions.

It is axiomatic that the process of income valuation involves the determination of the present value of future net incomes. It is convenient and illuminating to consider this present value of future net incomes as a sum of money which a potential investor in the project is justified in committing to the project at the present time. This investor, if the investment is to be a sound one, must assure himself that he will receive an adequate and reasonable return on the full amount during its impoundment and that the capital sum will be unimpaired. The rate of return must be commensurate with returns on investments to which are attached risks of a similar nature. It is evident that present value, as used here, has no necessary relationship to the cost of the good in which the investment is made.

What is the nature of the good which represents the physical aspect of the investment? It might be described as a crystallized conglomerate of land and building with other improvements which, in combination, act to produce a money revenue but which, individually, have only a potential economic value. Thus, unimproved urban land is valuable only by virtue of anticipated services; and buildings without land on which to place them are inconceivable. But the two elements, wedded into a productive unit, act as one to produce services for which people are willing to pay.

Another characteristic of this economic good is that it changes qualitatively with time. This gives rise to changes in value, for the change in quality affects the productivity of the combination of land and buildings. The conglomerate is vulnerable to different forces which influence productivity. The improvements deteriorate with age; social, economic, and technological changes result in obsolescence and a lessening attractiveness to buyers of the services offered. The location may be altered with respect to its productiveness in present use or in other potential uses. This comes about through physical, economic, and ecological alterations in the community. During the useful life of the project, these forces of change show their ultimate effect only with respect to the productivity of the project as a unit.

At some future time, it may come to pass that a greater return can be earned on the remaining investment or value of the project in some other use; i.e., its value in the new use will be greater than in the present use. This will mark the end of economic life of the original use. In some cases, this will call for the demolition of the existing improvements and the redevelopment of the land. With the land cleared of buildings, it is ready for whatever new use is then appropriate, and its value will be determined by the anticipated productivity of that use at that time. This terminal value may be quite different from the original land value,

either greater or less. Under other circumstances, the improvements will remain but be converted to a new use. In such case, the terminal value of the original project is determined by the value of the project as a whole in the new use, less the cost of conversion; again, the terminal value may be greater or less than the original land value.

At the time of appraisal, the value of a project may be expressed as the undifferentiated combination of the present value of the improvements and the present value of the land. For a new project, however, it is possible to assign separate values to land and building, since there has been no opportunity for qualitative change resulting from operation or from shifts in other factors affecting productivity. In Figure A, this composite value of a new project, representing the highest economic use, is illustrated by the left-hand bar. During the useful life of the project, as has been explained, the project will suffer a shrinkage in value which may be measured at the end of the economic life of the combination. Thus, the terminal value of the project at that time will consist of the total of the scrap value of the improvements (salvage value of materials less cost of demolition) and of the value of the land at this point of time. Thus, the greater or less the net scrap value and the terminal land value, the greater or less will be the terminal project value and the less or greater will be the loss in value. As suggested before, where the project is to be converted to some new use without demolition of the improvements, the terminal value will be based upon its value in this new use.

The terminal value of the project is illustrated by that part of the right-hand bar in Figure A which is enclosed by a solid line. The segment of the bar enclosed by a broken line represents the loss in the value of the project over the period of economic life.

The object of the appraisal procedure is to determine the total present value of the project. To accomplish this, it is necessary to know either (1) the shrinkage in value of the project or (2) the terminal project value. In addition, of course, estimates of productivity and expenses must be available.

In the first case, where the shrinkage in value is estimated and used as the known factor, the procedure is to determine the terminal value of the project. This last figure, added to the loss in value, will give the total present value of the project.

In the second case, where the terminal value has been estimated, the procedure is to calculate the loss in value which can be offset by revenues after deductions for expenses and a constant return on the terminal value. This last figure added to the terminal project value gives the total present value of the project.

For a new or proposed project, the appraised value may be determined by either of these two variations in procedure. This is true because it is possible either to estimate the terminal value or to estimate the prospective loss in value upon the basis of the known cost of the improvements new. However, for a project which has been in operation, only the second is applicable. The terminal value of the project must be a known or an assumed quantity upon which the process is based, since, once a project is in operation, land and buildings are indistinguishable sources of productivity, and separate values cannot be assigned.

A question may be raised as to the practicability of estimating terminal value. As a matter of fact, that problem is inherent in all income valuation procedures. Many appraisers assume that for projects near the beginning of economic life, the most reasonable estimate is that the terminal land value will be equal to the present land value and that costs of demolition will just offset salvage value. For projects in late life, it may be practicable to make more realistic approximations of terminal value. It should be emphasized that the method of estimating terminal value is not at issue here.

This discussion has been designed to clarify the concept that the amount which represents the current valuation of the project—the present value of future net cash revenue, or the justified investment value—is that amount on which the anticipated net revenue over economic life is sufficient to yield a reasonable return and to replace any depletion in the value of the good which may occur as a result of external physical and social forces which decrease productivity. Thus, the predicted stream of income and the terminal value are translated into their present value, represented by a lump sum which is imputable neither to land nor to building, but to the conglomerate—a sum which represents simply the total number of dollars which a prudent investor is now justified in investing in the entire project.

The purpose of the discussion up to this point has been to clarify the following principles:

1. The significant elements in the appraisal process are not land and building but rather terminal value and shrinkage in value.
2. At the end of the economic life of the original improvements, the terminal value may be greater or less than the present land value.
3. That portion of the net revenue which takes the form of a constant return or annuity applies not to the present land value but to the terminal value of the property. (This will be discussed further in connection with Figure B.)
4. The total present value of the appraised property is derived as the sum of the shrinkage in value and the terminal value and is not determined by adding together the present values of land and building.
5. In the case of a new or proposed project, the present justified investment in land is properly determined by deducting the cost of the improvements from the total value of the project. Conversely, the justified investment in the improvements is determined by deducting the cost of the land from the total value of the project. That which is commonly described as "land value" is, in effect, the justified investment in land under its highest and best use.

DETERMINATION OF ECONOMIC LIFE

As a component part of currently accepted appraisal methods, it is necessary to estimate the economic life of the improvements as an initial step and to employ this estimated life as a given factor in the appraisal formula. This estimate of economic life is based upon a number of factors which are generally recognized as its determinants. The most important of these determinants are the gross income produced by the project, its operating expenses, and the value of the property in future optional uses.

It is quite possible that this accepted method of estimating economic life may yield sufficiently accurate valuations. There is reason to believe, on the other hand, that the fewer the estimates, the more dependable the result. The plan which is to be presented here makes the estimate of economic life unnecessary. It employs the estimates of the separate factors which determine economic life and which are necessary to the appraisal process under any method. Upon the basis of the estimates of these separate factors, economic life may be determined as a by-product of the valuation procedure, but such determination is not essential.

The first requirement of this method is an estimate of annual gross incomes for an indefinite period, well beyond any possible maximum of economic life. This estimate of *gross* revenue is to be distinguished from the estimate of *net* revenue which is employed in other procedures. Such estimates of *net* revenue cover a definite period and are assumed to drop to zero at the end of the estimated economic life.

Any revenue premise, of course, must be determined by the characteristics of the productivity of the project to be appraised. It is possible to employ one of several standard income premises in the form of curves representing anticipated fluctuations in revenue, or the gross income may be estimated separately for each year.

The approach to the problem may best be explained by referring to Figure B. Let us assume that a project is proposed which will yield gross incomes over a

period of years as represented by the area under line "AA′." In this illustration, the expenses of operation are assumed to be constant and are indicated by the area under "CC′." Thus, the area "ACC′A′" represents the total net revenue of the project up to year "D′."

It will be recalled that the object of this procedure is to ascertain the capital sum upon which these net revenues will yield a reasonable return and, in addition, replace any impairment in value. Assume that the shrinkage in value has been estimated. The unimpaired portion, or terminal value, is an unknown sum, and, of course, the total shrinkage in value and the terminal value are not known. Since a constant share of the annual net revenue must be applied as a return on this unknown portion, the object of the procedure, expressed graphically, is to locate a horizontal line within the net revenue area "ACC′A′" so that (1) the net revenue falling above it will retire that portion of the investment which will be depleted and provide a return on the unretired balances of this portion and so that (2) the net income falling below the line will consist of equal annual returns on a sum to be determined. Thus, line "BX" is determined by adjusting its location until the present value of the area "ABX" is sufficient for the first purpose. This leaves area "BCFX" to provide a constant return. Since the vertical distance "BC" is determinable, it is possible to capitalize the annual return so determined to arrive at a capital sum representing the undepleted balance of the total justified investment. This, added to the known impairment, yields the total value of the project.

It will be noted that up to this point the economic life of the project has not been an active element in the process and that its determination is a by-product of the procedure. Thus, extending a line from point "X" vertically to line "DD′" indicates a useful life of "DX′" years. This implies that at the end of "DX′" years, operation of the project is no longer economically justified. It may be demonstrated that this is true since the indicated term of years will yield the greatest value for the unimpaired portion and thus the maximum total justified present value for the project.

If, for instance, the project were operated for a lesser number of years, represented by "DW′," a greater annual share of earnings would be required for the retirement of the depleted portion of the investment and for interest returns on the annual unretired remainder of that portion. Thus, the present value of the area "EAWE′" would be required for this purpose. This would reduce the annual residue of income available as a return on the unimpaired balance and yield a lesser capital sum for that portion and thus a lesser total value for the project.

If, on the other hand, the life of the project were to be extended, no change would be necessary in the area assigned to the impaired portion of the investment, "ABX," but beginning with the next period after year "X′," a lesser return would be available for the unimpaired part of the total. The investor would benefit by withdrawing his capital and investing elsewhere before the rate of return begins to drop.

Like all appraisal techniques, the method which has been presented here is simply a device for employing intelligent approximations to arrive at a generalization. This is certainly true of the determination of economic life as a by-product of this method. In practice, the economic life so determined should be tested for reasonableness in relation to the basic estimates of revenue, expenses, and terminal value or shrinkage in value. In some cases, revisions in these estimates may be indicated.

The mathematics of this approach to the valuation process has been worked out, but lack of space prohibits a full presentation here. In general, the procedure is similar to that employed by Frederick M. Babcock in his *Valuation of Real Estate* (McGraw-Hill, New York

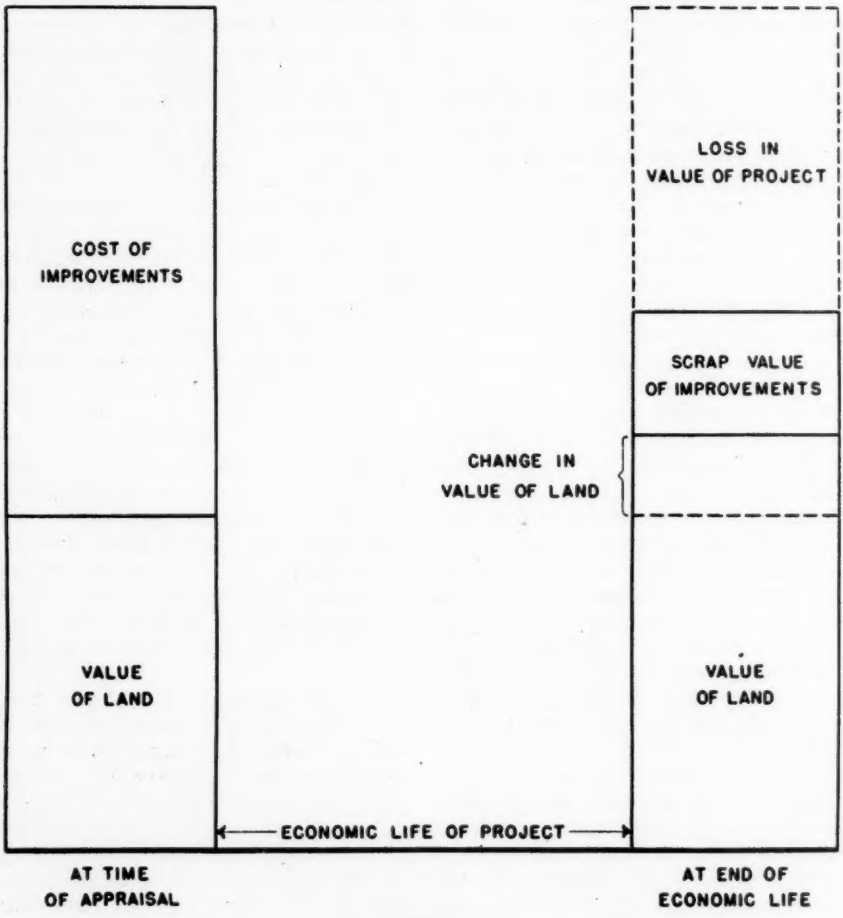
COST OF IMPROVEMENTS
VALUE OF LAND
LOSS IN VALUE OF PROJECT
SCRAP VALUE OF IMPROVEMENTS
CHANGE IN VALUE OF LAND
VALUE OF LAND
ECONOMIC LIFE OF PROJECT
AT TIME OF APPRAISAL
AT END OF ECONOMIC LIFE

FIGURE A

Assumptions:

1. New project representing the highest and best use of the land.
2. Value of land greater at end of economic life than at the beginning.
3. Salvage value of the improvements greater than costs of demolition.

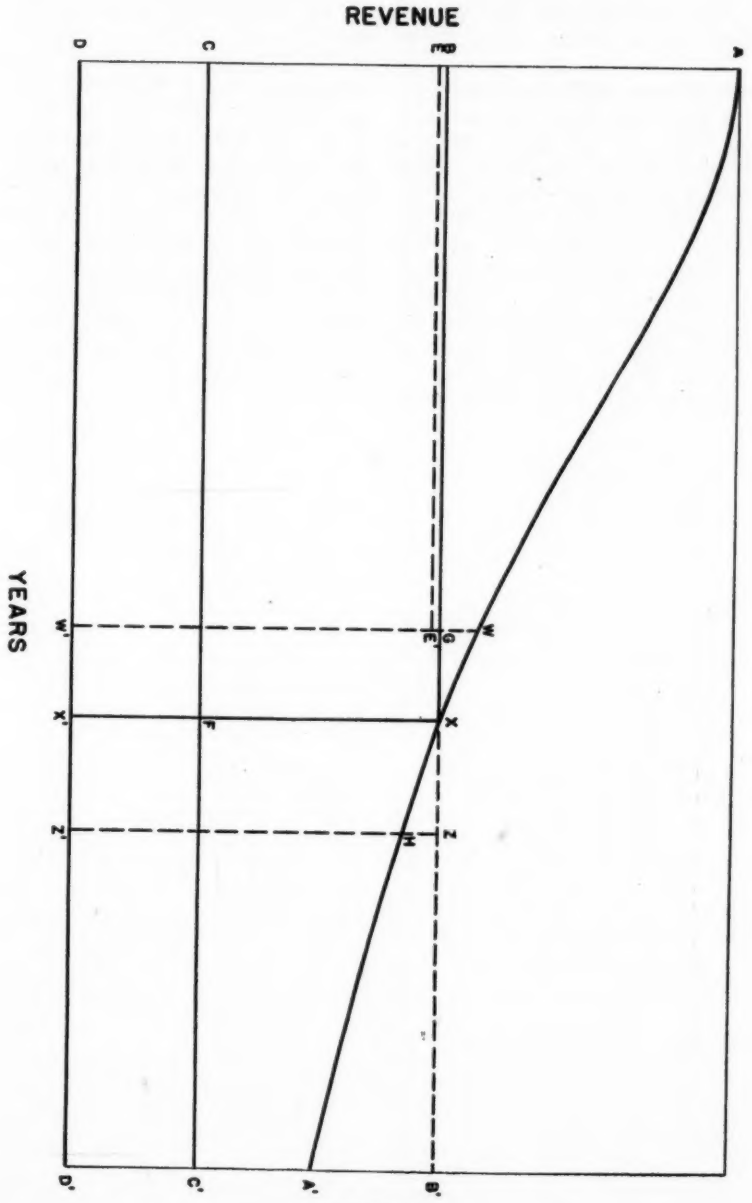

FIGURE B

and London, 1932). Both schemes employ formalized income predictions in the form of curves, and both require the use of present value tables based upon these curves.

There are two basic differences between the plans. In the first place, an estimate of economic life is necessary to the method developed by Mr. Babcock, while it is not required in the procedure described here. Finally, Mr. Babcock's income premises are predictions of *net* revenue, while estimates of *gross* revenue are required under this plan. In addition to providing for deviations from the income curves during the early years of operation, which is also provided for by Mr. Babcock, this procedure permits of similar variations in estimated operating expenses during the early years, as well as for increasing or decreasing expenses over the entire life of the project.

To eliminate involved mathematical processes, there has been developed in preliminary form a simple calculating chart for income appraisals, based upon the principles presented in this discussion. By selecting one of a number of revenue premise curves as reflecting the income characteristics of the project to be appraised, it is possible to determine quickly the project value after estimating expenses, the first year's gross revenue, and either the shrinkage in value or the terminal value.

Comment and Discussion

Tredwell—ON A SUGGESTED APPROACH TO THE CAPITALIZATION RATE

PLEASE permit me to extend to Thurston H. Ross, M.A.I., my sincere congratulations on his excellent article in the July issue of the JOURNAL, entitled, "Rate of Capitalization."

This is a subject which should receive more consideration from appraisers.

The only point in Mr. Ross's discussion that seems inadequate is the statement, "We do not find our capitalization rate upon the basis of a particular property in question; we derive it after an examination of particular kinds of money markets."

We are concerned with the valuation of individual parcels of real estate. It is difficult to see how the individual characteristics which may importantly affect the value can be ignored in selecting the capitalization rate.

Appraisers generally admit that the capitalization of net income is the preferred approach for income-producing properties. We must realize, however, that this implies a careful consideration and selection of the capitalization rate. There is still too great a tendency on the part of many appraisers to select a capitalization rate which will produce the result desired and then justify the rate selected by some such statement as, "In my opinion this is the rate required to attract capital to an investment of this type."

The influence of the capitalization on the valuation is shown by the following table:

Net Income	Capitalized Value at 7%	Capitalized Value at 8%	Per Cent Decrease in Value	Per Cent Increase in Value
$ 500	$ 7,143	$ 6,250	12.5	14.3
1,000	14,286	12,500	12.5	14.3

A decrease in the capitalization rate of 1 per cent means an increase in the value of about 14.3 per cent.

An increase in the capitalization rate of 1 per cent means a decrease in the value of about 12.5 per cent.

If we consider that competent appraisers normally reach opinions within 10 per cent of one another, then a difference of 1 per cent in their selection of capitalization rates alone would produce a difference greater than 10 per cent.

The purpose for which the appraisal is made should be considered in selecting the capitalization rate.

I am now considering the problem of selecting proper capitalization rates for the appraisal of some twelve hundred properties for a financial institution. The purpose of the appraisals is to bring up to date the valuations of the properties on which the institution has made first mortgage loans.

It was felt that the final rate should be built up by establishing a base rate and adding to this base rate factors to take care of individual variations in location, desirability, and trend.

The base rate was set up as follows:

Interest rate being paid on deposits	2 %
Institution's cost of doing business	½ %
Reserve against increase in interest rate paid and increase in cost of doing business	1 %
Reserve for losses and other contingencies	1½ %
Total base rate	5 %

To this base rate were then added penalty percentages based as follows:

Location Penalty	Excellent	—
	Average	1 %
	Poor	2 %
Desirability Penalty	Especial	—
	Average	1 %
	Undesirable	2 %
Trend Penalty	Upward	—
	Level	1 %
	Downward	2 %

This results in a property excellently located, especially desirable, and with an

upward trend having a final capitalization rate equal to the base rate of 5 per cent. The other extreme is a property poorly located, undesirable, with a downward trend having a final capitalization rate of 11 per cent.

Many appraisers will undoubtedly disagree violently with this method, especially when it results in a final rate as low as 5 per cent, but it must be remembered that the method was conceived in a period of low rates of interest when the price level and rent level were rising and when equities long thought dead were being re-established.

No brief is held for this approach. It is an attempt to avoid individual estimating of the rate as a whole and to produce a reasonable degree of uniformity.

The same idea can be adapted to various appraisal problems and should be of assistance in justifying the rate selected.

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* * *

Swett—ON THOUGHTS REGARDING IDLE SUBURBAN LAND

PROBABLY in no field of modern appraising is there so much loose thinking as in the appraisal of idle suburban land—house lots or acreage lying fallow for future development and building.

It is deceptively simple. In any section there always seems to be a "price per acre," a "price per front foot," or a "price per square foot" that is accepted as standard. All that is necessary is to multiply this by the frontage or the area, and there is your appraisal.

Tax assessments are usually made that way. Owners of such land usually compute their worth that way. Even the courts, unless the error is glaringly palpable, accept valuation estimates made upon this basis without question.

If a fifty-foot lot is worth $2,000, then ten fifty-foot lots are worth $20,000. If a given acre is worth $3,000, then the adjoining two-acre parcel is worth $6,000, and the ten-acre piece beyond is worth $30,000. Two times two equal four—simple.

Yet, it becomes clear, if we think of value in terms of the *present worth of future benefits,* that we must take into consideration the probabilities of the time involved and the interest and taxes to be paid before such future benefits may be realized. Whatever the basic price established by current sales, such sales are not to be had for the asking. The usual condition in any town is that the supply of idle land offered is several times any present ability of population growth to absorb it. The chances that any parcel of such land will be bought and put into actual use as a homesite may be measured by comparing the supply of such land with the average annual absorption. If the current supply is ten times the average annual absorption, all other things being equal, we may consider that there is one chance in ten of a sale during the current year and an even-money chance that it will be sold in five years. If "future benefits" must be so long deferred, it is obvious that their present value must be rather severely discounted.

To illustrate our point, let us imagine a certain average suburban town, with a record of steady and consistent growth and no booms nor depressions to confuse the picture. Let us suppose that land in this town is of a uniform quality and character, that one lot is like another and one acre like the next acre.

Mr. Jones has a lot. It is a typical 50x150-foot lot, and he pays taxes on it at the rate of $60 per year. Quite a few similar lots have been purchased by builders this year at a price of $2,500 each. What is the value of Mr. Jones's lot?

The obvious answer is $2,500. It is proved by comparative sales. But is that entirely true? Even if it *is* worth $2,500 to a buyer who is ready and willing to put it into use, is it worth $2,500 to Mr. Jones?

We must bear in mind that Jones is

getting no present benefit from it. The lot's only value to him lies in its eventual sale or use as a homesite, either by him or some other home builder. It is all *future* utility—not present. It actually has a negative *present* utility because of the tax expense.

If Jones should put his lot on the market today, what are the business odds that he would sell it within three months? Within six months? Within a year?

This involves an examination of the rate of growth of the town and the quantity of land available. If in this little model town of ours there are, on the average, twenty-five new homes built each year, and if there are a total of fifty such lots in the town, the chances of any given lot being sold within one year are twenty-five out of fifty. In other words, Jones has a sales expectancy, all other things being equal, of one year before his "future benefits" are realized.

If, under these circumstances, we are to measure the *present worth* to Jones of these future benefits, we must consider taxes and interest. His taxes for that year will be $60, and they must be deducted from the $2,500 sales price, which leaves $2,440. The present worth of $2,440 one year hence, discounted at a rate of interest which properly measures his hazard—let us say 8 per cent—is $2,259, which is the actual *present worth* of the parcel to Jones—whatever its present worth may be to a buyer who buys it for immediate use as a homesite.

That is the problem reduced to its simplest form. Perhaps it may be considered splitting hairs to consider these factors in the case outlined above. But, what if Jones owned 100 lots instead of one? And what if the total of idle lots in the town were a ten years' supply instead of a two years' supply? It makes an interesting problem.

Now let us consider the case of Mr. Brown, who owns a block of a number of acres located at the end of the same street on which we found Mr. Jones's lot. Encouraged by the $2,500 sales that have been made, Mr. Brown gets a surveyor and a steam shovel and opens up part of his land. He gets fifty lots out of his acreage, all similar in size and quality to Mr. Jones's lot.

Brown does a little calculating: the market price of individual lots is pretty well established at $2,500; he has fifty of them; therefore, they are worth a total of $125,000!

Apparently the tax assessor agrees with him. Each of the new lots is promptly assessed with the same $60 tax that Jones pays. If the assessor gave the wealthy Mr. Brown any breaks that he did not give Mr. Jones, he would soon hear from the latter.

But now our little town has one hundred available lots instead of fifty. The rate of absorption into use is still twenty-five lots per year, which indicates that it has a four years' supply. All other factors remaining equal, the probable sales expectancy for any given lot out of the one hundred available is advanced from one year to two years.

The present worth of $2,500 two years hence at 8 per cent is $2,143. The present worth of $60 per year for two years (the taxes) at 8 per cent is $107. Deducting the latter from the former, we have a remaining present worth of $2,036. The value of such a lot to a ready, willing, and able *user* may still hold firm at $2,500 and be thoroughly substantiated by current comparative sales. But the value to the speculative land holder is nearly 20 per cent less.

It is worth noting, furthermore, that nothing very much would be gained by dropping the price of the lots from $2,500 to $2,000. A few additional people might become owners instead of tenants by reason of the lower price, but they would simply create a vacancy somewhere else. In the long run, the rate of absorption of land cannot be accelerated by price reduction. Population growth—the annual increase in families to be housed—is the final control.

In the above illustration, I have pur-

posely simplified our model town. I have considered that the land was all alike, that one lot was just like another, that there was a steady and constant increase in families, that there were no booms nor depressions, and that there was no ebb nor flow of population into or out of the town.

This state of conditions, of course, is never found in actual practice. Each lot and each acre is a problem in itself. New subdivisions are opened which, by reason of unusual beauty of layout, absorb more than their share of current home building—at the expense, it should be noted, of the values and rate of sales of older sites. There is a constant variation, a constant flux of values back and forth between areas within the town and between towns themselves. Intelligent and farsighted operators can always make the profits to which their superior brains, imagination, or salesmanship entitles them.

But all of this ebb and flow of values is a great deal like the relative movements of the passengers on a transcontinental train as they move back and forth from their Pullmans to the diner and club car. They may alter their relative positions, but they are all moving West on the same train. Likewise, all vacant land is moving forward into use and occupancy on the train of population growth.

The outskirts of all of our cities and towns are filled with land that is idle, weed-grown, and speculatively held. Much of that land is good farm land and should never have been taken out of farm usage. Much of it still has its "highest and best use" as farm land. The fact that it is not put back into that usage is due largely to the self-deception of the speculators who are holding it.

In the appraisal of any such idle suburban land, therefore, I submit that there are two values—the value for use and occupancy and the value for speculative holding.

The first value—the value to the buyer who is ready to put the land into immediate usefulness as a homesite—is what is shown by the comparative sales. It tends to settle around a figure which measures the comparative amenities of the location or the neighborhood with those of other locations and neighborhoods.

But the value of idle land as a speculation, not for immediate use, is a much lesser value. We must consider and try to prophesy the probable future returns just as we do in the capitalization appraisal of investment properties. We must weigh land supply against probable future growth. We must consider the capitalized effect of annual taxes in reducing the present worth of the future benefits to be derived from sales.

In the suburbs of New York, some sixty years ago, a wealthy man acquired his home in some wooded land near a commuting railroad. To this original holding he added woodland and farm land for miles around, bought mostly from farmers, and proceeded to develop the whole area into a community of an unusual and delightful character. His purpose was only secondarily profit.

Each year a growing group of well-to-do businessmen made their homes there. It did not develop fast—such towns seldom do. But it developed soundly and well. Through sixty years its growth continued; then the founder died, and it became necessary, for inheritance tax purposes, to value the remaining land holdings in his estate.

These holdings comprised an outer belt a mile deep and running for a stretch of nearly three miles around the perimeter of the community. The tax maps and the owner's maps showed this belt as being split up into a number of separate parcels, just as they were originally bought from the farmers. Actually, however, this belt was continuous and unbroken land. Within this belt was the built-up area of the town, and in this area the holdings were scattered parcels of from one to twenty acres. Some of these parcels were entirely surrounded by improved estates; others were contiguous to each other.

It was, of course, a comparatively simple matter to appraise the value of any *one* of these parcels. The tax assessor had done just that, and then he *summed up the total.* So had previous appraisers. (There is even some question whether the courts would accept any other method of appraisal.) But the sum total was far in excess of any possible expectation of a sale of the entire holding and was far in excess of any present worth of future benefits to the estate.

The land was entirely unused—mostly rolling woodland. Neither the soil nor the contours were adapted to farm usage. Except for its potential value as homesites, this land had no greater value than any other piece of similar woodland in any country town. If it were worth any more than woodland value, the additional worth arose solely from its *future* usefulness for homesites.

How far in the future? In some sixty years of development, in good times and bad, the average annual absorption of this land into usage has not exceeded twenty acres. During the last decade this has been somewhat accelerated. A brisk demand for moderate-priced homesites in the last few years has been noted, but the section has been so well established with well-to-do homes that a quick and cheap sell-out program could not be considered. Such a process, in effect, was precluded by municipal zoning ordinances as to minimum site areas. For all practical purposes, the liquidation of this tremendous land holding is restricted to a fairly well-to-do market, which is a thin market and a slow one.

With some fifteen hundred acres to be absorbed into use and occupancy, and an average annual absorption expectancy of, let us say, fifty acres, it requires little arithmetic to realize that the last increments of this acreage will not be put into use for another thirty or forty years.

If we apply our present worth calculations to this situation and deduct the capitalized value of the annual tax payments, we soon see that there comes a point where the *present worth* of much of that acreage, the sale of which bids fair to be deferred far into the future, is greater as simple woodland than as speculative acreage. If the realization of future benefits must be so long deferred and taxes must be paid through all these years, then the outlying acres might better be sold off as country woodland today than held for homesites.

Actually, of course, it will probably be liquidated before that time by the sale of large parcels for speculative holding. But this process will merely spread through several hands, the same speculative ownership that was formerly vested solely in the founder. The principle will remain the same—the total value of these speculative holdings will depend upon the length of time required to move them into actual use and occupancy as homesites. The appraising theory of the present worth of future benefits applies just as logically and surely to acreage of this sort as it does to a city skyscraper.

The principle is not new. In a recent issue of the JOURNAL ("The Appraisal of Cemeteries I," by Martin W. Lederer, April, 1937), some very interesting tables bearing on this same point were worked out with relation to cemetery subdivision appraising. All appraisers, consciously or unconsciously, give very conservative values to large acreage holdings. But there is still a widespread belief that two times two equal four! The devastating effect of interest and taxes on idle land is still too much under-appreciated by the courts and by the public and, perhaps, sneered at as "high-brow" or "impractical" appraising. However, had these factors been more generally studied and appreciated in the past, we should not today have the outskirts of our cities occupied by a belt of idle land, the graveyards of speculators and developers who staked their fortunes on simple arithmetic.

GILBERT N. SWETT, M.A.I.

Maplewood, New Jersey.

* * *

Thorpe—ON VALUATION OF OLD STRUCTURES ON BUILDING PLOTS

HOW would you determine the value of old structures which are obsolete in that they cannot produce any net return on the land which they encumber? Such situations occur frequently in localities where high land values are indicated by the absorption of former residence areas for business use.

Quite often, and I might say usually, an appraiser, after arriving at the valuation of a piece of land which is a present potential building plot suitable for improvement in the highest degree, and therefore very valuable, will place a small value on buildings standing on the land, fixed arbitrarily without any attempt to sustain the figure by any theory of values. Frequently, the buildings may be in fine physical condition and may earn considerable rent, although perhaps not enough to pay taxes. The land, encumbered with the structurally sound but obsolete buildings, may have a conceded market value far in excess of its earning capacity. In this case, such buildings, inadequate as they may be, have a useful value limited to their earnings up to the moment of demolition, at which time they become encumbrances. Their value is the amount they will earn during that period, less the cost of demolition, provided the former exceeds the latter. In a case where the cost of removing the buildings is greater than the rent produced, the buildings have a minus value which is reduced by the earnings.

In the following example, it is assumed that the land has a definite market value due to its location; it is situated on a former mansion type street, from which the original occupants have moved because of noise and heavy traffic. The plot is a corner location, measuring 100 feet by 100 feet, and the block of which it forms a part is essentially an office building centre. The four old residences on this land are rented upon a monthly basis for business purposes.

At the present time, it is doubtful that a builder could obtain a loan for the construction of an office building on the site because there is still a rather high percentage of vacancies in such buildings. Conditions are improving, however, and the demand for such space is increasing, so that such a plot, if available, would be saleable at $500,000. The appraiser estimates that it will take five years for conditions to improve sufficiently to warrant the construction of a new office building, but such buildings are usually built in anticipation of demand.

I would work out the appraisal in this way:

The property to be appraised is a plot of land measuring 100'x100', situated on the southwest corner of X Street and Y Street, on which there are four old residences, which have been converted to business use by very simple alterations and are rented upon a monthly basis for $600 a month, or $7,200 a year. Taxes are $13,580, of which an amount of $1,080 is on the buildings and $12,500 on the land.

Yearly rents		$ 7,200.00
Yearly expenses:		
Taxes on buildings	$ 1,080.00	
Water	200.00	
Repairs	250.00	
Commissions for renting (average)	100.00	
Commissions for collection	216.00	$ 1,846.00
Net annual return from buildings		$ 5,354.00
Present value of $5,354 a year for five years, discounted at 3% semi-annually		$22,834.81
Less estimated cost of demolishing buildings		5,000.00
Value of buildings		$17,834.81
Land		$500,000.00
Buildings		17,800.00
Total		$517,800.00

By this method I have been able to place a valuation on the buildings based

upon rents rather than using an arbitrary figure.

E. EVERETT THORPE

New York City.

* * *

Schackne—ON APPRAISING THE BUSINESS DISTRICT OF TOLEDO, OHIO, FOR TAX PURPOSES

THE recent task of appraising approximately 14,000 parcels of land in the central business district of Toledo, Ohio, was one of the largest jobs of its kind ever undertaken in this city. Not only does this appraisal serve its present purpose, i.e., a reappraisal every six years of all property in Lucas County (made mandatory upon the county auditor in each of the eighty-eight counties of Ohio by state legislation), but it establishes a scientific system of valuation, to be used for many years to come.

A complete new system, based upon scientific real estate valuation, including a new record of all property, was adopted. All real estate was photographed by blocks for permanent record. A card file was employed to keep intact the large amount of information pertaining to values gathered in this appraisal. The data include land measurements; location in respect to other parcels; streets; legal description; improvements; and history. A complete data picture of each property may be obtained from the card.

Mr. Hale T. Shenefield (County Auditor) sought to give the county its first scientific and accurate appraisal of property. Extensixe research was made by Dr. George Leffler, Associate Professor of Finance at the University of Toledo, for many months prior to the actual appraisal work. This research disclosed that actual sales of property in the district of ordinary business, eliminating forced sales, mortgage foreclosure sales, and transfers in closing estates, were valuable criteria of actual property worth. All factors were taken into consideration to assure uniformity and equity and to eliminate such wide variations as have been evidenced by the past "hit and miss method" generally employed in the valuation of property. Formerly, many taxing officials would reappraise property enmasse by taking the entire tax duplicate and raising or decreasing the same by a certain percentage, which depended upon general conditions at the time of the appraisal. To make this clearer, values were set and taxes were levied in accordance with the appraiser's conception of the ability of the owners to pay.

Extensive thought and study were given to the downtown business area, which includes a wide variety of property—retail, wholesale, warehouse, industrial, railroad, waterfront, and some blighted areas in a transition stage from old residential to business use of some kind—and also to the "problem" of appraising each parcel as being vacant and available for its highest and best purpose.

In the detailed work, methods of the American Institute of Real Estate Appraisers were followed as closely as possible. It must be realized that this valuation was for taxing purposes and not for other purposes, such as sale and financing.

It was necessary to start from scratch as if this were the first appraisal ever made. No reference was made at any time to the former tax appraisal, as we felt that we should not even remotely be influenced by having in mind any former tax value. Each parcel of property was considered separately, but subsequently its relation to the surrounding property was taken into consideration.

May I point out that, in determining the separate land values, the procedure was in accordance with the rules set forth in the *Ohio Appraisement Manual for Real Property, issued by the Tax Commission of Ohio.* It was mandatory that the *Manual* be used by the County Auditor and the appraisers appointed by him. It prescribes that each separate parcel of real property shall be valued at its true value in money. Since the *Manual* makes no attempt to define the term "true value in money," it was assumed that the

value desired was "the consideration which a willing buyer is warranted paying to a willing seller, both having a knowledge of the potential utility of the property involved." The *Manual* further sets up the usual rules for corner influence, alley influence, depth percentage, and other tables used generally in making an appraisal.

No hard and fast rule can be laid down in making appraisals. The only practical plan that can be followed at a fairly reasonable cost is an intelligent use of these tables, which, I believe, secures a more equitable general appraisement than that resulting from employment of the old method. After all, it is only through wide appraisal experience in his community that the appraiser, in guiding local authorities on the valuations of land, finds the rules that are most easily applied to the respective locations.

It was vitally necessary that the right type of men be appointed by the Auditor for the revaluation of the downtown business area. At preliminary conferences, it was made known to the Auditor that the appraisal committee should consist of members of the American Institute of Real Estate Appraisers. He selected Mr. Edmund T. Collins and Mr. Donald F. Hiett, in addition to myself, not only because we are Members of the American Institute of Real Estate Appraisers, but chiefly because of our general knowledge of appraisal work and the fact that we possessed important data concerning Toledo and the real estate therein.

Mr. Shenefield, without doubt, felt that with the combination of these qualifications he had selected the proper men to help him carry out this tremendous and exceedingly important undertaking. It would be miraculous if any appraisal were perfect; but, in this case, with the employment of certain tables, methods, the many factors which establish value, and certain data previously used by this group in downtown appraisal work, the system followed was worked out from a scientific standpoint. Some details of this plan may now be discussed.

To begin the appraisal, it was necessary to determine the most valuable site in the city. This was approached by having traffic counts made throughout the central business section during the day and also during certain evening hours and making an analysis of these data. This check indicated that the highest value was at the southeast corner of Superior and Adams Street, occupied by F. W. Woolworth & Company. We could not accept this one evidence as a final criterion of value, so the appraisers made a comparative study of income and other factors which establish the value of real estate. This special study confirmed the information the traffic count had indicated.

The establishment of a base value from which to start is an important point. The rest of the downtown district was then valued accordingly upon a unit basis, using an area of one foot frontage by one hundred feet in depth. Due to the fact that many of the blocks in Toledo contain but 200 to 240 feet of frontage, we decided that only forty feet would be considered "corner property." Where lots were deeper or shorter than the standard 100-foot unit, the depth percentage table was used.

Corner influence was calculated as follows: To the low inside value for the "main" street was added 72 per cent of the low inside value of the "side" street. Thus, with a "main" street low inside value of $4,000 and a "side" street low inside value of $1,800 a unit, to arrive at the value of the corner property—not over forty feet in frontage—an amount of $1,300 (72 per cent of $1,800) was added to the $4,000, resulting in a corner value per unit of $5,300.

Alley influence was considered to depend upon the width of the alley and whether it was in the rear of the property or on the side.

Width of Alley	Percentage to be Added for Rear Alley	Percentage to be Added for Side Alley
10 feet	2.5 per cent	6.5 per cent
12 "	3.0 "	7.0 "

14	"	3.9	"	7.9	"
16	"	5.0	"	9.0	"
18	"	5.7	"	9.7	"
20	"	6.3	"	10.3	"
22	"	6.7	"	10.7	"
24	"	6.9	"	10.9	"

It will be noted that the percentage increases at a faster rate for alleys running from ten to sixteen feet in width than it does for those sixteen to twenty-four feet. This is based upon the theory that each foot of increase in width up to sixteen feet adds a greater ratio of the value of the alley to the value of the lot than each additional foot from that width up to twenty-four feet.

Irregularly shaped lots were also taken care of by the table applying to lots of this nature. In this article it seems unnecessary to present the various other tables used in making the appraisal which were prescribed by the *Ohio Appraisement Manual.*

In addition to all of these prescribed influences on value, the appraisers used data from their own files relating to comparative values, income from key properties, leases of record, sales, trends of growth, transportation, parking facilities, etc. as a check against field data.

Improvements were measured by Works Progress Administration crews and then studied by a staff of experts. Our land values, as previously stated, were established for "highest and best use"; however, in a large number of cases, land is so improved as not to be available for its best use. The data were reviewed many times in the attempt to have the final results conform to sound values.

The work of our special committee was reviewed by Mr. H. O. Walther, M.A.I., of Chicago, for the purpose of co-ordinating our values with those of other districts bordering the central business district.

At the conclusion of the appraisal, Auditor Shenefield published the district and street unit values; it is planned that the appraisals will be published later in book form.

The cost of this appraisal, which involved every parcel of property in the entire county, was approximately $250,000.

One of our recommendations to the County Auditor was that the correlation of land value and improvement value should be made by competent real estate appraisers rather than the values derived from the summation of separate values of land and improvements by the Auditor's staff. However, the total appraisal was such a colossal undertaking that the precise methods of the American Institute of Real Estate Appraisers could not be completely applied.

We feel that the appraisal followed, in so far as possible, scientific methods which will not only give the local government a more complete record of taxable real property but will make future reappraisals much easier.

JOHN R. SCHACKNE, M.A.I.
Toledo, Ohio.

The Appraisal Docket

Cases, decisions, and other matters involving rulings and precedents affecting real estate and valuation.

William Wilson, Editor

QUALIFICATIONS OF VALUE WITNESSES

OF practical interest to the members of the Institute is the question of their legal qualification to testify in judicial proceedings wherein the determination of land value is at issue. It may not be amiss, therefore, to recite briefly some legal concepts and decisions on this score.

Witnesses may testify only as to those matters about which they had opportunity to, and did, observe—in other words, about which they have knowledge. This is a primary qualification for the ordinary witness. Again, there are certain matters of which, though they may have been observed, an understanding cannot be had without some special preparation or familiarity. This capacity to arrive at a correct understanding has been called "experiential capacity" and is a necessary qualification of the "expert" witness. Such capacity may be obtained either through occupation or training. 1 Wigmore, Evidence (2d Edition, 1923) §§ 555, 556, and 650. In this sense, every witness testifying to land values is an expert. Therefore, when the determination is made of the qualification of land value witnesses, not only the knowledge of the witness must be shown, but his capacity to have acquired it. Such determination is a matter for the judge and not the jury. On this score, there is and should be no differentiation between experts. The sole question is as to the fitness of the particular witness to the matter at hand. 1 Wigmore, Evidence (*supra*), § 556. And the judge's determination therein will ordinarily not be disturbed. *Mary Jane Stevens Co.* v. *First National Bldg. Co.*, 89 Utah 456, 57 P. (2d) 1099 (1936). However, once the question of the qualification of the witness to testify is settled, a great differentiation is and should be made between experts as to the weight to be given their respective evidence. *Brewer* v. *Blue Mountain Consolidated Water Co.* ——— Pa. Super ———, 191 A. 408 (1937).

* * *

PARTICULAR EXAMPLES OF QUALIFICATION

With these principles in mind we may then properly analyze and rationalize the various decisions concerning qualification. Thus, an owner of property is qualified to testify as to the value of his property, without more. *Weber* v. *West Seattle Land and Improvement Co.*, 188 Wash. 512, 63 P. (2d) 418 (1936); *Davenport* v. *Haskell*, ——— Mass. ———, 200 N.E. 409 (1936); *State* v. *Hammer*, ——— Ind. ———, 199 N.E. 589 (1936). So also is a part owner and occupier. *Union Joint Stock Land Bank* v. *Knox County*, 20 Tenn. App. 273, 97 S.W. (2d) 842 (1936). So also may a principal stockholder testify on behalf of the corporate owner as to the value of its property, without more. *Weber* v. *West Seattle Land and Improvement Co., supra* (semble). As may also the husband of such stockholder. *Mary Jane Stevens Co.* v. *First National Bldg. Co., supra.* As the Court said in *State* v. *Hammer, supra,* at page 595:

> "It is generally held that the owner of real estate is assumed to possess sufficient acquaintance with it to estimate the value of the property, although his knowledge on the subject might not be such as would qualify him to testify if he were not the owner."

The case of *Mary Jane Stevens Co.* v. *First National Bldg. Co., supra,* contains certain concrete illustrations on the question of qualification sufficiently interesting to warrant a quotation therefrom. But it must be borne in mind that the Court's remarks must be rationalized by the application of the above principles. (For convenience, the citations given in the quotation, together with additional citations of the author,

are set forth as foot notes). At page 1119:

"The matter of determining the qualification of a witness to testify as to value rests largely in the discretion of the court[1]. The discretion exercised will not be disturbed except for palpable error. The witness is asked, not for his knowledge of transactions involving the property, but for his opinion, which involves a judgment which may be the result of a number of factors including knowledge of transactions. The witness must not be a mere transmitter of information. Any one of us can do that. He must be able to give a judgment based on knowledge of values generally in that vicinity, or with the sales transactions of the particular property in question. In other words, he must live in the atmosphere of transactions involving the sale and purchase of that real estate or similarly located property and have absorbed and made part of him that knowledge and experience. It may not be his experience, but the experience of others. He may not be a real estate dealer provided he has absorbed the knowledge which gives him the basis of a judgment.[2] It is not necessary that he dealt in land in the immediate vicinity if he has dealt in land in the general vicinity.[3] It is not necessary that he be an expert if he have the sufficient acquaintanceship with the land in the vicinity which enables him to judge.[4] An opinion founded upon a knowledge of the location, productiveness, or the market value of the land in the vicinity is competent.[5] A person who has personally examined real property, and made inquiry of qualified persons as to its value, is competent to testify as to its value, though he does not live in the City where it is located.[6] A witness not a real estate expert, who states that he knew the value of the property generally in and about the City, but did not know the value of the piece in controversy until a year after the period at which its value was in question, is not a competent witness upon the question of value.[7]"

The correct application of the principles of qualification (observation and experiential capacity) is aptly illustrated in the case of *Peterson* v. *Grayce Oil Co.* (Tex. Civ. App.), 37 S.W. (2d) 367 (1931), affirmed in ——— Tex. ———, 98 S.W. (2d) 781 (1936), which concerned the effect on plaintiff's oil well of defendant's use of a vacuum pump. Two witnesses were allowed by the trial court to testify as to the damage done to the plaintiff; both were familiar with values of oil leases but only one with the operation of a vacuum pump. The testimony of the one witness was held inadmissible, the Court remarking at page 785:

"Concerning matters not capable of *actual verification* by factual observation, but dependent largely upon *deductive reasoning and inductive conclusions* (italics the author's), experts, even though competent, may widely differ. The classic illustration of this is noted by Herbert Spencer when he refers to the fact that when Huyghens discovered and promulgated the undulatory theory of light, Newton declined to accept the correctness of the discovery; and Huyghens likewise declined to accept Newton's theory of gravitation, now universally approved. . . . This only illustrates in a very marked degree the care which should be exercised in considering expert testimony. It, of course, should be received when coming from a qualified source; but certainly care should be exercised to prevent the introduction of testimony from an unqualified witness when even qualified witnesses themselves might differ."

* * *

ADMISSIBLE TESTIMONY

Once the value witness has been qualified, the question arises as to what may he testify. For example, may a witness, in proceedings to determine the value of Blackacre, testify as to the sale of Whiteacre, a similar property voluntarily sold within a reasonably related time? On this the Courts differ, denying such testimony in *Hubbell* v. *City of Des Moines*, 166 Ia. 581, 147 N.W. 908, Ann. Cas. 1916 E. 592 (1914); *Maxwell* v. *Iowa State Highway Commission*, ——— Ia. ———, 271 N.W. 883 (1937) (Though such testimony is admissible to qualify the witness and establish his competency as an expert, it is not admissible as substantive evidence of the value of the premises in question.); *In re Thompson*, 127 N.Y. 463, 28 N.E. 389, 14 L.R.A. 52 (1891); *Neeley* v. *Western Allegheny R. Co.*, 219 Pa. St. 349, 68 A. 829 (1908); and permitting such testimony in *Peoria Gas Light Co.* v. *Peoria Term. Ry. Co.* 146 Ill. 372, 34 N.E. 550, 21 L.R.A. 373 (1893); *St. Louis, etc. R. Co.* v. *Clark*, 121 Mo. 169, 25 S.W. 192, 26 L.R.A. 751 (1893). The former is said to be the minority rule and obtains to avoid raising so many collateral issues. The latter view, holding such

[1] *City of Geneseo* v. *Schultz*, 257 Ill. 273, 100 N.E. 926 (1913); *Peterson* v. *Grayce Oil Co.* (Tex. Civ. App.) 37 S.W. (2d) 367 (1931), affirmed in ——— Tex. ———, 98 S.W. (2d) 781 (1936) (court's discretion held erroneous).

[2] *Geohegan* v. *Union Elevated R. Co.*, 266 Ill. 482, 107 N.E. 786, Ann. Cas. 1916 B, 762 (1915); *City of Geneseo* v. *Schultz, supra*, n.1.

[3] *Hall* v. *Kansas City, etc. R. Co.*, 89 Kan. 70, 130 P. 664 (1913).

[4] *City of Geneseo* v. *Schultz, supra*, n. 1; *City of LaFayette* v. *Nagle*, 113 Ind. 425, 15 N.E. 1 (1888); *Pennsylvania and N.Y.R. and Canal Co.* v. *Bunnell*, 81 Pa. 414 (1876); *Board of Directors of St. Francis Levee Dist.* v. *Permenter*, ——— Ark. ———, 92 S.W. (2d) 391 (1936); *Williamson County* v. *Brock*, 367 Ill. 159, 10 N.E. (2d) 654 (1937).

[5] *Central Pac. R. Co.* v. *Pearson*, 35 Cal. 247 (1868).

[6] *Jones* v. *Snyder*, 117 Ind. 229, 20 N.E. 140 (1889).

[7] *Burke* v. *Beveridge*, 15 Minn. 205 (1870).

evidence admissible, is said to be the majority rule and obtains because the Courts adopting such rule feel that sales of similar property within a reasonably related time furnish the best evidence of the value of the property in question. As to what constitutes "similar" property, see *Wassenich* v. *Denver*, 67 Colo. 456, 186 Pac. 533, 17 A.L.R. 101 (1919), wherein it is held that similarity does not mean identity but resemblance and that determination of similarity is a matter of judicial discretion.

Another question as to admissibility of testimony arises in condemnation cases where the owner seeks to prove that his land, the subject of the proceedings, has an adaptability for a different use which would give it greater value; for example, that it may in the future be subdivided for homesites. The Courts generally hold that such adaptability should be considered as an element of present value, provided the adaptation is probable and lies in the reasonably near future. *Department of Public Works* v. *Foreman Bank*, 363 Ill. 13, 1 N.E. (2d) 75 (1936); *Continental Land Co.* v. *U. S.*, 88 Fed. (2d) 104 (C.C.A. 9th, 1937).

Again, in condemnation proceedings involving Blackacre, may the settlement between the condemnor and the owner of Whiteacre be given in evidence? Such testimony is generally held inadmissible on the ground the settlement is likely involuntary. *Searcy* v. *State Highway Commission*, 145 Kan. 709, 67 P. (2d) 534 (1937); *Peoria Gas Light Co.* v. *Peoria Term. R. Co.*, *supra*; *State Highway Commission* v. *Buchanan*, 175 Miss. 157, 166 So. 537 (1936) (semble). *Contra: Louisiana Highway Commission* v. *Merchant*, ——— La. App. ———, 174 So. 696 (1937). So also is the appraisement award, from which an appeal is taken, excluded. *Searcy* v. *State Highway Commission*, *supra*. Though the appraiser involved therein may, if otherwise qualified, testify without reference to the award. *State* v. *Hammer*, *supra*.

* * *

DAMAGES FOR NEGLIGENT PROSECUTION OF CONDEMNATION PROCEEDINGS

Most Courts are in accord upon the rule that where condemnation proceedings have been unreasonably prolonged by the condemnor and are finally abandoned, the property owner may recover damages resulting from the delay, although the condemnor had the absolute right to abandon the proceedings. *State* v. *Beck*, 333 Mo. 1118, 63 S.W. (2d) 814, 92 A.L.R. 373 (1933); *Roach* v. *Village of Winnetka*, 366 Ill. 578, 10 N.E. (2d) 356 (1937). The damages resulting from such delay (e.g. loss of tenants, decrease in rent, decrease in saleability, failure to renew mortgage) are generally recoverable, however, only by independent proceeding and not in the condemnation case itself. *State* v. *Beck*, *supra*, and cases cited in the annotation thereto. The rule, however, may be emasculated by the Court's interpretation of unreasonable delay, as in *Roach* v. *Village of Winnetka*, *supra*, where the award was made September 23, 1932, and nothing was done thereafter by the defendant village until the suit was dismissed on February 24, 1933, (seventeen months) though the plaintiff had on numerous occasions requested action. This delay was held not unreasonable.

What to Read

Comments on recent surveys, books, and articles of interest to real estate appraisers.

C. M. Jones, Editor — **Librarian, American Institute of Real Estate Appraisers**

Book Reviews

Geiger, George Raymond. THE THEORY OF THE LAND QUESTION. *New York, The Macmillan Company, 1936. 237 pp. $2.00.*

THIS book consists of five brilliant essays so logically and intimately related that, while each in itself is a somewhat complete treatise, each so builds up to the next succeeding essay that a natural sequence is maintained.

"The Meaning of the Land Question" comes first in order and forces the conviction that all labor and economic activity is based upon land and that life, human effort, even man himself are futile or visionary without this fundamental commodity. As Dr. Geiger says: "Take away from man all that belongs to land, and he is but a disembodied spirit." Thus is the reader led to wonder if a better understanding of the land question might not furnish the solution of our economic ills.

"Land Value" logically constitutes the second chapter or essay and introduces in an interesting way every phase of the theory of value. The conclusion is inescapable: "At least two classes of value must be considered in economics—that of reproducible human enterprise and that of irreproducible nature."

The third essay, "Land and Capital," comes next in proper sequence. We are here brought to consider that land and capital are different—that "land is the foundation and not the result of human energy" and is inexhaustible, while capital, the product of human effort, is both exhaustible and reproducible. Figuratively, Dr. Geiger suggests: "Land is the pedestal on which capitalism stands" and perhaps "offers the unifying and simple synthesis that economics have always lacked." An elaboration of this point of view takes the reader on the following excursion in the field of history.

"Historical Aspects of the Land Question" constitutes the fourth chapter. The excursion properly starts with "Primitive Land Tenure" and follows the economic trail down to the present. All along the way it has been noted that those who own land control those who do not. This last being true, it follows that taxation of land is of vital interest to both parties.

The fifth and concluding chapter is, therefore, "Socialization of Land Rent through Taxation." While many will no doubt disagree with the theory evolved here, certainly all free and unbiased thinkers must find it interesting and quite provocative of thought. Even hearty opponents will hardly miss the fascination of the author's presentation of such an absorbing subject as land and its taxation.

Dr. Geiger's book is brilliantly written, highly interesting, and worthy of great study. No appraiser, Realtor, landowner, nor student of economics should fail to read "The Theory of the Land Question."

HAROLD M. HENDERSON, M.A.I.
Birmingham, Alabama.

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National Association of Assessing Officers. ASSESSMENT PRINCIPLES AND TERMINOLOGY. *Chicago, National Association of Assessing Officers, 1937. 166 pp. $2.00.*

THE widespread awakening in the need for the study of valuation principles and the standardization of appraisal technique and terminology has found its way into local government as is demonstrated by the fact that in 1934 the National Association of Assessing Officers was formed. Since that time this Association has conducted two studies through selected committees, and their reports have been published in a book entitled "Assessment Principles and Terminology."

The study is purposely elementary in order

that it might form a foundation for the work which this Association may do hereafter. It is a discussion of the problems pertaining to the selection of the assessor; his duties; his tenure of office; his compensation and necessary overhead; supervision and training; the frequency of assessments; the assessment district and its division; the problem of review and equilization; and how these things may be best effected.

Because the theory of assessment is of particular interest to the appraiser, only that part of the book is given special consideration. The report states: "A primary requisite of all standardized assessment systems is separate valuation of land and improvements. Entirely different techniques have been developed for the wholesale appraisal of these two major divisions of real property. The appraisal of improvements begins with the establishment of approximate reproduction costs. Land, for all practical purposes, is not reproducible; hence it does not have a reproduction cost. Land appraisals for tax purposes, therefore, are made by means of comparison with parcels whose market values have been established by recent sales or whose present worths can be estimated with some degree of accuracy by capitalization of income. The final valuation of a parcel of improved real property is a summation appraisal arrived at by totaling the fractional appraisals of land and improvements."

The report, in justification for assuming that the summation appraisal is the correct approach for the assessing official, has recognized the policy adopted by the National Association of Real Estate Boards as to general appraisal procedure and counters with the three reasons: (1) Assessors' budgets are limited so that they must accomplish their task with a minimum cost. (2) That "To permit the unrestrained exercise of the assessor's judgment to the point required for a composite (non-summation) appraisal would be to foster injustice and political favoritism from which the public would have little recourse." (3) The taxpayer is primarily interested in comparing his assessments with those of others and that this comparison is greatly facilitated by separate assessments of land and building.

Unquestionably, there is justification for the reasons outlined. It is common knowledge that too many assessing officials are elected or appointed upon a basis of political prestige or patronage and not upon training or ability. Proper safeguards should be set up to protect the public against incompetency and dishonesty in government. It is heartening to note that the report gives consideration to and makes certain recommendations regarding the use of what is termed a composite appraisal. Assessors are urged to compile and utilize sales and other data from which the combined value of land and improvements can be estimated. The manner of compiling these data and the care with which such data must be analyzed are given, and it would appear that as a more comprehensive outline of procedure is made and as the Association studies modern methods of appraising their present recommended system of the summation method is sure to be tempered by the approved principles of valuation generally used by the appraiser.

The book is a contribution to appraisal literature. It will mark a definite step forward in the work of the government assessment of property because it is a conscientious effort to establish a standard and fair method, which can be applied and thereafter more thoroughly analyzed and adapted to local conditions.

WERNER KIEPE, M.A.I.

Salt Lake City, Utah.

New Articles

"WIDER USE OF APPRAISAL DATA DEVELOPS BETTER CONDITIONS IN REAL ESTATE FIELD."

Horace Russell, general counsel of the Federal Home Loan Bank Board, issued a statement recently in which he said: "The control of mortgage lending policy in the future requires full and adequate appraisal data." Mortgage lenders, according to Mr. Russell, are providing themselves with more adequate appraisal data and more competent appraisals. As a result, the mortgagor exercises a better control over his lending policies. Although the HOLC ceased making new mortgages in June, 1936, it is setting an example by maintaining and further developing its appraisal department. *The Economist. December 11, 1937, p. 3. $0.35.*

"APARTMENT OPERATING COST DATA: KNICKERBOCKER VILLAGE."

Knickerbocker Village is a large housing development on Manhattan's lower East Side, containing 5,235 rooms. The two thirteen-story buildings have 1,585 apartments, renting at an average of $12.50 per room a month. Of the total income, 35.22 per cent goes to pay interest on the RFC loan. The financing items alone exceed the total maintenance costs. A comprehensive table itemizes the operation and maintenance costs per room. *Real Estate Record, Metropolitan Edition. December 4, 1937, p. 21. $0.70.*

"AN APPRAISAL OF FARM LAND ASSESSMENTS," by R. R. Renne and H. H. Lord.

In an effort to show how out of proportion

the burden of taxes is on farm land, this article analyzes the farm land assessments in Montana, which the authors believe to be quite applicable to a large portion of the Great Plains. The haphazard and unscientific methods used are illustrated, and the resulting inequitable distribution of farm taxes which is so general throughout the country is discussed. The purpose of the article is to make helpful suggestions for the correction of these glaring defects in assessments so that a more scientific and equitable system may ultimately be established. *The Journal of Land and Public Utility Economics. November, 1937, p. 360. $1.45.*

"APPRAISING SINGLE-FAMILY HOMES," by Herman O. Walther.

A prominent Chicagoan in appraisal work enumerates the various items that must be considered in appraising the single-family residence. He puts population at the head of the list and makes some keen observations on the trend and its effect on value. He emphasizes the fact that the appraiser should be influenced by long-time trends rather than by short-time conditions. In conclusion, he advocates a connection with one of the appraisal organizations in order that the competent appraiser keep abreast of the times. *Real Estate. November 13, 1937, p. 6. $0.30.*

"PROPERTY-LIFE INSURANCE AVAILABLE SOON," by Dr. Hans Heymann.

An explanation of the effect of a new section of the Illinois Insurance Law with regard to real estate, commerce, and industry is given by a well-known German economist. This property-life insurance provides for a twofold protection: a risk insurance reimbursing the owner for damages due to depreciation and a replacement insurance that places such money as may be left in the damage reserve to be paid over to the policyholder for the replacement of the insured property. *The Economist. November 6, 1937, p.5. $0.35.*

"CONSTRUCTION COST ESTIMATING," by Major E. H. Boeckh.

The purpose of the Boeckh tables is to enable the appraiser to determine local construction costs from his national average value. The conversion from the national average to the local cost condition is made by referring to the "Construction Cost Index Table," also included here. *American Building Association News. November, 1937, p. 648. $0.55.*

"STABILIZING REAL ESTATE MARKETS," by Herbert O. Frey.

Philadelphia is widely known as the "City of Homes." Like the other cities in the United States, Philadelphia went through a period in 1923 to 1928 when thousands of additional homes were built and the market was glutted. There were numerous vacancies, and rentals were competitive. The financial institutions got together and set up a master file in which they co-ordinated their data through a central information bureau under the name of "Property Service, Inc." Through this central clearing house, information was obtained as to rental differentials and tenant movements, tenant credit, survey maps, lot size, mortgage applications reported, and all kind of appraisal data. This property service is looked upon today as a necessity in Philadelphia. *Trust Companies. October, 1937, p. 396. $0.80.*

Regulations Governing Extension Courses

ARTICLE I

BE it enacted by the Governing Council of the American Institute of Real Estate Appraisers of the National Association of Real Estate Boards in regular session at the Biltmore Hotel, New York City, this twelfth day of May, 1937, that the Education and Research Committee of this Institute be and hereby is empowered to prepare and offer Extension Case-Study Courses in Real Estate Appraisal under the following rules and regulations.

ARTICLE II—INSTRUCTORS

All instructors connected with these Case-Study Courses shall be approved by the Education and Research Committee of the Institute and shall, in general, possess the following qualifications:

Section 1. The Chief Instructor of each Course shall be an M.A.I.

Section 2. The Field Director shall be an M.A.I.

Section 3. Each Instructor shall have had teaching experience or have completed the Institute's Case-Study Courses I and II.

Section 4. Each Instructor shall attend a teachers' conference conducted by the Institute and/or be specially coached by the Institute's Educational Director in the technique of conducting these Case-Study Courses.

Section 5. There shall be at least one approved Instructor for each twenty-five students enrolled.

ARTICLE III—LECTURES

The following regulations shall govern the preparation and delivery of lectures in all Extension Case-Study Courses offered by this Institute:

Section 1. No lecture shall be a verbatim presentation of the text material.

Section 2. Each lecture shall be outlined by the Instructor who is to present it, and the outline shall be approved by the Educational Director of the Institute, by the Chairman of the Education and Research Committee, or by the Chairman of the Institute's Subcommittee on Instruction by not later than thirty days before the Course opens in which the lecture is to be given.

Section 3. Each lecture shall be related to the Institute's text material on the same subject to be used in the Course.

Section 4. Each lecture outline should be accompanied by a bibliography of reading material to be available to students in the Course.

Section 5. Lecture periods shall be not less than fifty minutes in length.

Section 6. Each Case-Study Course shall include at least thirty lectures.

ARTICLE IV—TEXT AND REFERENCE MATERIAL

Text and reference material used in the Extension Case-Study Courses shall include the following:

Section 1. Regularly required text material shall be furnished by the Education and Research Committee of the Institute.

Section 2. The Education and Research Committee of the Institute shall loan a reference library of appraisal reports for use in connection with each Extension Case-Study Course.

Section 3. The Librarian of the American Institute of Real Estate Appraisers shall assist the local faculty in charge of each Extension Case-Study Course to secure suitable books and other reference material.

Section 4. The local group sponsoring each Extension Case-Study Course shall be responsible for the safe and prompt return of all library books, appraisal reports, and other material loaned or rented for use in the Course and shall pay whatever costs may accrue through rental, transportation, damage, or loss.

Section 5. None of the Institute's copyrighted text material may be reproduced either by members of the faculties of the Extension Case-Study Courses, by students in such Courses, or by anyone else in either typed, photostated, mimeographed, planographed, printed, or any other form.

Section 6. The copyrighted text material forwarded by the Institute for use in the Extension Case-Study Courses may be loaned to students enrolled in such Courses (and to no others) for an indefinite period of time. Such material remains the property of the Institute and is subject to recall at any time. Each student to whom the text material is loaned shall sign a receipt therefor on a form furnished by the Institute, and this receipt shall be filed with the Institute's Educational Director in the Headquarters Office.

ARTICLE V—SPONSORS OF EXTENSION COURSES

Extension Case-Study Courses may be sponsored by Chapters of the American Institute of Real Estate Appraisers, by Member Boards of the National Association of Real Estate Boards, or by accredited educational institutions, subject to the regulations set forth in this Statute No. 2,

and subject further to the supervision of the Education and Research Committee of the Institute.

ARTICLE VI—STUDENTS

Enrollment in these Extension Case-Study Courses shall be subject to the following rules:

Section 1. Each student shall file application for enrollment in duplicate, setting forth his education and experience background and pledging himself not to reproduce the Institute's copyrighted text material nor to permit such reproduction to be made by others.

Section 2. A local registration committee shall pass upon each application for enrollment and shall promptly forward the duplicate of each accepted application to the Educational Director of the American Institute of Real Estate Appraisers for the Institute's permanent records.

ARTICLE VII—EXAMINATIONS AND REPORTS

Examinations and reports shall be governed by the following rules:

Section 1. Questions and problems for the final examination of students enrolled in the Extension Case-Study Courses shall be furnished by the Education and Research Committee, together with specific instructions governing the conduct and supervision of such examinations. The local Dean of the Extension Case-Study Courses shall forward all examination papers to the Education and Research Committee of the Institute to be rated.

Section 2. Each student enrolled in an Extension Case-Study Course shall make an appraisal of a subject-property assigned by the local Field Director. He shall write a detailed report of this appraisal, and this report shall be forwarded by the local Dean of the Course to the Education and Research Committee of the Institute to be rated.

Section 3. Examination papers shall be rated upon the basis of:

(1) Correctness of answers.
(2) Clarity of expression.
(3) Analysis and interpretation of data.
(4) Valuation technique.
(5) Reasonableness of value estimate.

Section 4. Appraisal reports shall be rated upon the basis of:

(1) Form, arrangement, and appearance.
(2) Adequacy of supporting data.
(3) Analysis and interpretation of data.
(4) Valuation technique.

Section 5. The Education and Research Committee of the Institute shall record all grades in the Headquarters Office of the Institute and shall forward duplicate rating report cards on each student to the local Dean of the Course, who shall countersign the cards and mail one copy to the student. One copy of each rating card may be retained in the official records of the local sponsoring group.

ARTICLE VIII—PROMOTION OF EXTENSION COURSES

The following rules shall govern the advertising and promotion of Extension Case-Study Courses:

Section 1. All advertising and promotional costs shall be paid by the local sponsoring group.

Section 2. All advertising, all publicity, and all promotional literature of whatever character shall be approved by the Chairman of the Institute's Education and Research Committee.

ARTICLE IX—FIELD WORK

Each Extension Case-Study Course shall be based upon the Institute's case-study method of instruction.

Section 1. The local extension faculty shall select subject-properties for study and appraisal and secure the consent of the owner or manager for using these properties in the Course.

Section 2. Students shall be organized into groups of five for the purpose of field work. Not more than two groups of five each should be assigned to any one property.

Section 3. The Field Director shall build a file of information on the neighborhood in which the subject-properties are located. The information in this file should include as much of the following as possible:

(1) A street map of the area.
(2) An occupancy map of the neighborhood.
(3) An aerial picture of the area.
(4) A brief historical sketch of the area.
(5) Population statistics from 1920 to date.
(6) Racial distribution and trends.
(7) Taxation and assessment statistics.
(8) Record of sales in the area during the past year by classes of property.
(9) Record of rental levels.
(10) Vacancy data.
(11) Purchasing power.
(12) Contemplated and assured public improvements.
(13) Number of people on relief.
(14) Zoning.
(15) Building restrictions.
(16) Deed restrictions common in the area.
(17) New building in the area during the last year by type, size, dollar-volume, etc.
(18) Names, addresses, and telephone numbers of real estate men in the area who are willing to confer with students.

(19) A list of sources of information about the area—names, addresses, and telephone numbers.
(20) Bibliography of published data on the area.
(21) Unit costs of building material.
(22) Labor wage scales, etc.
(23) Status and trend of building permits.
(24) Status and trend of foreclosures.
(25) Status and trend of marriage rates.
(26) Status and trend of divorces.
(27) Status and trend of mortgage money.
(28) Trend of business failures.
(29) Trend of tax delinquencies.
(30) Trend of city indebtedness in which this area is involved.
(31) Percentage of vacant lots in the area.
(32) Are zoning and/or building restrictions being violated in the area?
(33) Are there any indications of probable changes in building restrictions in the near future?
(34) Is the area improving, retrograding, or static? Why?
(35) Amenities in the area.
(36) Absence or presence of vice in the area.
(37) F. H. A. neighborhood rating.
(38) Occupation of people by percentages.

Section 4. The Field Director shall build a file of information on each subject-property. The information in this file should include as much of the following as possible:

(1) Occupancy map of both sides of the street where the property is located and of near-by streets in cases where occupancy on side streets has a bearing upon the subject-property.
(2) Photograph of the property. (There should be photographs of all the subject-properties available for purchase by the students for use in their appraisal reports.)
(3) Dimensions of the lot.
(4) Cost report on the improvements.
(5) Tax history of the property.
(6) Sales history of the property.
(7) Occupancy record of the property.
(8) Operating statement of the property for the past five years (if an income property) if possible.
(9) Cost tendencies in operating expenses.
(10) Floor plans of the building.
(11) General description of the building and its equipment.
(12) Approximate number of competing properties in the neighborhood, that is, properties with similar occupancy, paying approximately the same level of rent, or having approximately the same market value.
(13) Age of building.
(14) Approximate number of comparable improvements built in the neighborhood last year.
(15) Approximate number of comparable properties sold in the neighborhood last year.
(16) Is the subject-property better, poorer, or on the par with the average properties of this type in the area?
(17) Deed restrictions.
(18) Legal description.

ARTICLE X—COSTS

The following rules shall govern costs involved in connection with all Extension Case-Study Courses:

Section 1. The Institute shall furnish one complete set of text material for each student enrolled in the Course, assist as far as possible in securing reference material, supervise the Course, prepare examination questions and problems, grade or rate examination papers and appraisal reports, keep a permanent record in the Headquarters Office on all students, and furnish the Dean of the local extension faculty with duplicate grade cards for each student. For this service, the local sponsoring group shall pay to the American Institute of Real Estate Appraisers the sum of $25.00 for each student enrolled in the Course, such payment to be made at the Headquarters Office of the Institute on or before the opening of the Course.

Section 2. All costs of promotion, advertising, publicity, instruction, rent, or other costs shall be paid by the sponsoring group and shall in no way be a liability of the American Institute of Real Estate Appraisers.

New Members

Admitted to the Grade of Member

JOHN A. WESTROM, LOS ANGELES, CALIFORNIA. Born, Ottawa, Ontario, Canada, August, 1882; valuator for F.H.A.; appraiser for H.O.L.C., Federal Home Loan Bank of Los Angeles, Western Homes Federal Savings and Loan Association, and Founders Federal Savings and Loan Association; professional territory covers southern California; member of the Southwest Branch, Los Angeles Realty Board; member of the State Association; member of the faculty, State Real Estate Institute, 1936; chairman, Educational Committee, Southwest Branch, Los Angeles Realty Board, 1936-1937; Honorary Director at Large, California Real Estate Association; active broker member of the Los Angeles Realty Board; lecturer, teacher, and author; ten years' experience in the appraisal of real property, including the valuation of vacant, commercial, clubhouse, residential, hotel, and industrial properties; conducted a small loan business for several years; served on the Appraisal Committee of Los Angeles Realty Board for four years.

Z. E. BELLS, OAKLAND, CALIFORNIA. Born, Beaver Falls, Pennsylvania, April, 1887; fee appraiser for Oakland Federal Savings and Loan Association, Home Owners' Loan Corporation, and Federal Housing Administration; Chairman, Oakland City Planning Commission; member of the Appraisal Committee, Oakland Real Estate Board; President, Bells-Gilberg, Ltd., Realtors; director of the Oakland Real Estate Board; professional territory covers Alameda, Contra Costa, and Bay Counties; lecturer and author; completed business administration course offered by the LaSalle Extension, course in salesmanship offered by the International Correspondence Schools, Sheldon salesmanship course, and appraisal course and general real estate course at the University of Southern California; taught first general real estate class for Oakland Real Estate Board in 1936 and first appraisal class for Oakland Real Estate Board in 1928; conducted class for salesmen's examination under State Real Estate Commissioner in 1929; ten years' experience in the appraisal of real property, including homes, apartments, stores, industrial properties, and special purpose properties; licensed real estate broker since 1918; qualified in court as expert on value of residential and business properties; appraised for Pacific States Savings & Loan Association, for Western Loan & Building Association, and for Oakland Federal Savings & Loan Association; experienced in construction of homes, stores, and garages; extensive residential sales experience.

F. D. COURNEEN, OAKLAND, CALIFORNIA. Born, Butte, Montana, October, 1897; Director and member, Oakland Real Estate Board; member of the Oakland Appraisal Association; Vice President, Secretary, Director, and member of the Loan Committee of the Oakland Federal Savings & Loan Association; Vice President, Director, and Manager of the Alameda Investment Company; Vice President, Director, and Manager of the City Mortgage Company; President and Manager of the New American Homes and Investment Corporation; member of the Chamber of Commerce Residential Development Committee; professional territory covers Alameda County, Contra Costa County, and San Francisco Peninsula; author of a number of technical articles on real estate appraising; twelve years' experience in real estate and mortgage loan; ten years' experience in the appraisal of real property, including valuation of homes, apartments, business properties, and industrial properties; licensed real estate broker since 1925; qualified in court as expert in the valuation of apartments and residential property since 1935; appraised for Alameda Investment Company, City Mortgage Company, Mercantile Mortgage Company, Western Loan and Building Company, and Oakland Federal Savings & Loan Association; experienced in residential sales and in the building and construction of homes; fee valuator for Federal Housing Administration, San Francisco Underwriting Office; member of the Appraisal Committee, Oakland Real Estate Board.

WALTER N. GABRIEL, OAKLAND, CALIFORNIA. Born, Glidden, Iowa, August, 1885; President of Home Loan Security Company; member of the Oakland Appraisal Association; President of the Mortgage Bankers Association of Northern California; member of the Oakland Chamber of Commerce; Chairman of the Mortgage and Finance Division, California Real Estate Association; licensed contractor of the state of California; appraiser for the Central Bank of Oakland and the State Board of Equalization; broker member of the Oakland Real Estate Board; professional territory covers East Bay cities of Alameda County—Oakland, Piedmont, Berkeley, Alameda, Albany—and El Cerrito and Richmond in Contra Costa County; University of California, College of Mechanics; Vice President and General Manager of Alameda Investment Company for eighteen years; mortgage loan,

subdivision, and construction sales for twenty-nine years; Chief Underwriter, Federal Housing Administration, San Francisco Insuring Office, 1934 to 1936; twenty-nine years' experience in the appraising of real estate, including the valuation of all types of properties; licensed real estate broker in the state of California since 1915; qualified in court as expert on appraising of apartment buildings in 1931; appraised for Central Bank of Oakland; residential sales total more than ten million dollars.

CHARLES G. GWYNN, OAKLAND, CALIFORNIA. Born, San Francisco, California, December, 1900; President of Gwynn-Shields Company (a corporation, formerly Maiden-Gwynn Mortgage Company); member of the Oakland Real Estate Board; member of the Oakland Appraisal Association; professional territory covers San Francisco, Oakland metropolitan area, and surrounding territory; high school, three years of college, and courses in architectural drawing and estimating; three years of group study in Oakland Appraisal Association; twelve years' experience appraising real property, including the valuation of homes, apartments, stores, office buildings, industrial property, farms, and special purpose properties; licensed real estate broker in the state of California since 1926; experienced as a contractor and builder; fee appraiser for Federal Home Loan Bank of Los Angeles; fee valuator for Federal Housing Administration.

RALPH A. KNAPP, OAKLAND, CALIFORNIA. Born, Oakland, California, October, 1888; active member of the Oakland Real Estate Board; member of the Oakland Appraisal Association; professional territory covers Alameda, Contra Costa, and San Francisco Counties; high school and University of California extension courses in economics and business cycles and a student of all real estate and appraisal courses given by the State Association; conducted classes in real estate and appraisal for local real estate board; twenty-two years' experience in the appraising of real property, including the valuation of homes, apartments, stores, office buildings, industrial property, farms, and special purpose properties; licensed real estate broker in the state of California since 1910; qualified in court in 1931 as expert on the value of apartments, homes, and business properties; appraised for the Realty Mortgage Insurance Company and the Oakland Title Insurance Company; six years' experience in painting and decorating; four years' experience in building single-family homes; experienced in residential sales since 1910.

WILLIAM BAILIE KYLE, OAKLAND, CALIFORNIA. Born, Great Britain, March, 1892; President of the W. B. Kyle Company; President of the Melrose Investment Company; Manager of the Hill Company; Vice Chairman of the Oakland Appraisal Association; broker member of the Oakland Real Estate Board; professional territory covers Oakland, Berkeley, Alameda, and vicinity (East Bay Cities); A.B. degree from University of California, 1919 (Mathematics); B.S. degree from University of California, 1920 (Civil Engineering); instructor in appraising, Oakland Real Estate Board, 1935-1936; sixteen years' experience in appraising real property, including homes, apartments, stores, industrial property, and office buildings; licensed real estate broker in the state of California, 1924-1937; qualified in court as expert in appraising residential property in 1936; appraised for New World Life Insurance Company, Anglo-California National Bank, Citizens' Federal Savings & Loan Association, and Federal Housing Administration; supervised the building of twelve homes, 1926-1927; reconditioned fourteen homes, 1936-1937; fourteen years' experience in residential sales.

EDWARD C. DEE, SAN FRANCISCO, CALIFORNIA. Born, New York City, February, 1890; independent real estate appraiser and broker; active broker member of the San Francisco Real Estate Board; professional territory covers San Francisco metropolitan area; special valuator for U. S. Bankruptcy Court, 1922; member of the District Committee, Stafford Revaluation City and County of San Francisco, 1926-1927; member of the Education Committee, San Francisco Real Estate Board, 1928-1929; member of the original San Francisco group organized for study of appraisal work, 1934-1937; member of the group subscribing for Schmutz' appraisal lecture course, 1936; member of F.H.A. staff reappraising properties and appraising loans for San Francisco Bank, Bank of America, and Hibernia Bank, 1936; ten years' experience in valuation of real property including appraisal of apartment houses, industrial property, garages, office buildings, vacant land, and commercial properties; licensed real estate broker, state of California since 1924; qualified in court as expert on value of machinery; six years' experience in heavy construction while President and General Manager of the Premier Machinery Company; sales experience in San Francisco area.

M. L. FRIEDLANDER, SAN FRANCISCO, CALIFORNIA. Born, San Francisco, California, April, 1880; independent real estate broker; trustee and manager of the Van Denburgh Estate, San Francisco; member of the San Francisco Real Estate Board; professional territory covers San Francisco, Oakland, Berkeley, and outlying suburban communities in the metropolitan area; Chairman of the Education Committee, San Francisco Real Estate Board, 1928-1937;

Chairman of the State Education Committee, 1935; member of group taking Schmutz' appraisal lecture course, 1936; member of District Committee, Stafford Revaluation City and County of San Francisco; member of original group organized for study of appraisal work, 1934-1937; twenty years' experience in appraising real property, including theatres, subdivisions, and industrial property; licensed real estate broker in state of California for thirty years; qualified in court as an expert on value of business property; residential sales experience in San Francisco, Burlingame, Oakland, and Berkeley.

F. BURT HULTING, SAN FRANCISCO, CALIFORNIA. Born, San Francisco, California, January, 1894; Realtor and appraiser; member of the San Francisco Real Estate Board; professional territory covers San Francisco, the East Bay Cities, and the San Francisco Peninsula Cities south to Palo Alto; A.B. degree, University of California, 1912-1916; one year in Boalt School of Jurisprudence, Harvard Law School, 1916-1917; Boalt School of Jurisprudence, University of California, August to December, 1917; member of original study group organized in San Francisco for study of real estate appraising, 1934-1937 (weekly meetings); member of group subscribing to a course of lectures on real estate valuation given by George L. Schmutz; conducted a few short training courses for Federal Housing Administration valuators in its methods; twelve years' experience in appraising real property, including the valuation of vacant land, homes, commercial property, gas stations, and stores; licensed real estate broker since 1933; qualified in court as an expert on the value of apartment buildings in 1933; appraised for West Coast Life Insurance Company, Connecticut Mutual Life Insurance Corporation, and Northern Life Insurance Company.

EDWIN ELWOOD LUNSTEDT, SAN FRANCISCO, CALIFORNIA. Born, San Francisco, California, May, 1892; Secretary-Treasurer of Madison & Burke, Inc.; active member of the San Francisco Real Estate Board; professional territory covers San Francisco; member of original study group organized in San Francisco for the study of appraisal work; member of the group subscribing to George L. Schmutz' appraisal lecture course; fourteen years' experience in appraising real property, including residential, stores, garages, office buildings, apartments, hotels, and loft buildings; licensed real estate broker, 1927; qualified in court as an expert on the value of apartment houses in 1927 and 1929; appraised for The Equitable Life Assurance Society and the Wells Fargo Bank & Trust Company; fourteen years' residential sales experience.

DWIGHT L. MERRIMAN, SAN FRANCISCO, CALIFORNIA. Born, San Francisco, California, May, 1900; partner of E. S. Merriman & Sons; Director of The Harris Machinery Company; Director of the San Francisco Real Estate Board, 1936-1937; Director of the San Francisco Chamber of Commerce, 1937; Director of the Golden Gate International Exposition, 1937; President of the San Francisco Junior Chamber of Commerce, 1936; active member of the San Francisco Real Estate Board; professional territory covers San Francisco metropolitan area and central and northern California; graduate of the University of California, degree of Bachelor of Arts; member of the original appraisal study group conducted by George L. Schmutz in San Francisco in January, 1936; eight years' experience in appraising real property, including vacant lots, stores, residences, industrial property, commercial property, and farms; licensed real estate broker in state of California; qualified in court as an expert on value of industrial property, 1935; fourteen years' residential sales experience.

WILLIAM MAC ROSSIE, GREENWICH, CONNECTICUT. Born, Hartford, Connecticut, July, 1889; Vice President and Treasurer of Ladd & Nichols, Inc., Greenwich, Connecticut; Vice President and Treasurer of Ladd & Nichols, Inc., New York City; President of MacRossie & MacRossie, Inc. (insurance brokers), New York City; President for two years and Director for eight years of the Real Estate Board of Greenwich, Connecticut; Director of the Connecticut Association of Real Estate Boards for several years; professional territory covers Greenwich, Connecticut, and other parts of Fairfield County and adjacent sections of Westchester County, including Rye, Harrison, Bedford, and New York City; lecturer and author; B.A. degree from Columbia University, 1911; M.A. degree from Columbia, 1912, plus one additional year's graduate study in Political Science and Economics; took special course in building construction at Columbia in 1934; completed Real Estate Appraisal I and II offered by the American Institute of Real Estate Appraisers at Columbia University in 1937; fifteen years' experience in the appraising of real property, including homes, apartments, stores, vacant lots, sand pits, and other types of real estate found in metropolitan areas; licensed broker in the state of New York since 1922; qualified in court as an expert on the value of residential and business property since 1927; appraised for the Greenwich Home Owners' Loan Association and numerous private firms; experienced in the construction of homes, in the sale of residential property, and in the mortgage business.

PATRICK HENRY CLARK, STAMFORD, CONNECTICUT. Born, Paris, Texas, November,

1900; Supervisor of City Mortgages and City Real Estate and appraiser for The Equitable Life Assurance Society; member of the Stamford Real Estate Board; professional territory covers state of Connecticut, western Massachusetts, and Westchester County, New York; attended school at Paris, Texas, Emory and Henry Academy, Emory, Virginia, and University of Tennessee, Knoxville, Tennessee; fourteen years' experience in appraising real property, including homes, apartments, stores, and office buildings; ten years' experience in supervising construction; fourteen years' experience in residential sales.

JESSE L. WINEBRINIER, WASHINGTON, D. C. Born, Louisville, Kentucky, December, 1896; Underwriting Supervisor, Underwriting Division, Federal Housing Administration, Washington, D. C.; individual member of the National Association of Real Estate Boards; professional territory covers the United States, Alaska, and Hawaii; author and lecturer; Greagers School of Business Training, Louisville, Kentucky; Federal Housing Underwriting School, part of course held at George Washington University; Appraisal I Course offered by the American Institute of Real Estate Appraisers at the University of Chicago, 1935; other correspondence courses of the National Association of Real Estate Boards; Alexander Hamilton Institute; seventeen years' experience in the appraisal of real property, including homes, apartments, stores, office buildings, industrial property, farms, and special purpose property; qualified in court as an expert on the value of real property; appraised for the Penn Mutual Life Insurance Company; experienced in building and construction; twelve years' experience in residential sales.

MORRIS B. ASHTON, CHICAGO, ILLINOIS. Born, Salt Lake City, Utah, September, 1903; appraiser for the Great Lakes Mortgage Corporation and mortgage correspondent for the Metropolitan Life Insurance Company; Secretary of the Winton Realty Company; Secretary-Treasurer of Lambda Alpha; active member of the Chicago Real Estate Board; professional territory covers northern Illinois, northern Indiana, and southern Wisconsin; author, teacher, and lecturer; college work taken at University of Utah, 1924-1928, and at Northwestern University, 1929-1937; completed Appraisal II Course offered by the American Institute of Real Estate Appraisers at Columbia University, 1937; on the teaching staff for real estate subjects at Central Y.M.C.A. School of Commerce in Chicago; eight years' appraisal experience, including the valuation of homes, apartments, stores, office buildings, and churches; licensed broker in the state of Illinois; qualified in court as expert on the value of residential property, 1933-1935; appraised for the Metropolitan Life Insurance Company, The Equitable Life Assurance Society, the Chicago Title and Trust Company, the Central Republic Trust Company, and the Franklin Building and Loan Association; residential brokerage experience from 1924-1936.

O. P. CURRAN, JR., CHICAGO, ILLINOIS. Born, Chicago, Illinois, September, 1870; President of O. P. Curran, Jr., Inc.; active member of the Chicago Real Estate Board; professional territory covers Chicago and Evanston, Illinois; graduate of Chicago Manual Training School, 1888; Princeton University, 1892; Civil Engineer, 1893-1908; construction and building public works in United States and Canada; real estate business in Chicago since 1908; twenty years' experience in appraising real estate property, including leaseholds, apartments, residences, and business property; qualified in court in 1918 as an expert in real estate values; appraised for Metropolitan Life Insurance Company and the Chicago Title & Trust Company; construction experience in railroads, irrigation systems, bridges, and all classes of buildings.

LEONARD JAMES ROBINSON, CHICAGO, ILLINOIS. Born, New Orleans, Louisiana, March, 1892; General Manager of Wittbold Investment Company; trustee of Wittbold's Rapid Transit Terrace Realty Trust; partner of Wittbold Realty Company, specializing in marketing the better type of subdivisions, building construction, and brokerage; active member of the Chicago Real Estate Board; professional territory covers the North Side of Chicago and North Shore districts; sixteen years' active experience in subdividing land, real estate brokerage, and building construction; ten years' experience in the appraising of real property, including the valuation of acreage, lots, homes, apartments, retail stores, garages, etc.; completed a two-year real estate course given at the Central Y.M.C.A. College, Chicago; completed a four-week appraisal course offered by the American Institute of Real Estate Appraisers at the University of Chicago, 1935; licensed real estate broker in the state of Illinois, 1919-1935; qualified in court as an expert on values of acreage, farms, and country estates; built over $100,000 in homes and apartments since 1919; sold over $7,000,000 of homes, apartments, stores, and vacant lots since 1919.

STANLEY ROE, CHICAGO, ILLINOIS. Born, Chicago, July, 1903; Secretary of Mark Levy Realty Company; member of the Chicago Real Estate Board; professional territory covers city of Chicago and suburbs; author, lecturer, and teacher; ten years' experience in the appraisal of real property, including homes, apartments, stores, office buildings, industrial property, farms, and special purpose properties; licensed real estate broker in the state of Illinois; qualified in court as an expert on the value of

various types of properties; appraised for Connecticut Mutual Life Insurance Company of Hartford, Connecticut, Republic Realty Mortgage Corporation, and numerous private lines.

HAROLD CONE, TOPEKA, KANSAS. Born, Emporia, Kansas, November, 1889; senior member of the Society of Residential Appraisers; Assistant State Appraiser for the Home Owners' Loan Corporation; individual member of the National Association of Real Estate Boards; professional territory covers state of Kansas; high school and college, B.S. degree; in charge of party on land valuation for Kansas and Oklahoma rate cases, also Federal valuation, Santa Fe Railroad; in charge of party on Federal Land Valuation, states of Minnesota, Washington, and Oregon, Great Northern Railway Company; qualified in court as expert on value of railroad and residential properties; appraised for Pioneer Trust Company, Pioneer Savings & Loan Association, and numerous building and loan companies; twenty years' experience in appraising real property; experienced as general contractor of residential properties; residential sales experience in promoting and selling own properties.

PHILIP E. BENNETT, BOSTON, MASSACHUSETTS. Born, Lynn, Massachusetts, December, 1897; Manager of The National Shawmut Bank of Boston, Real Estate and Mortgage Department; Assistant Cashier; member, Mortgage Committee; director, 68 Beacon Street, Inc.; managing director of The Boston Dwelling House Company; associated with Building Owners & Managers Association; member of The Boston Real Estate Exchange; professional territory covers New England; Dartmouth College, B.S. and M.C.S. degrees; course in building and estimating, Franklin Union, Boston; courses in real estate, Boston University and Harvard University; course in Public Speaking, Boston University; fifteen years' experience in appraising real property, including homes, apartments, stores, gasoline stations, and special purpose property; qualified in court as an expert on the value of business and residential property; appraised for The National Shawmut Bank of Boston and associated banks, County Bank & Trust Company, and the Federal Reserve Bank of Boston, as well as other institutions; extensive experience in building and construction; experienced in residential sales.

GERALD F. HEALY, FLINT, MICHIGAN. Born, Watertown, New York, October, 1893; Director of the Genesee County Real Estate Board; Past President of the Michigan Real Estate Association; member of the Genesee County Real Estate Board; professional territory covers state of Michigan; author and lecturer; C.E. degree from Cornell University, 1915; Vice President of the Gakelly Real Estate and Construction Company, 1920-1924; partner of Healy & Carey (business and industrial real estate), 1924-1936; owner of G. F. Healy (Michigan business properties), 1936 to date; sixteen years' experience in appraising real property, including stores, apartments, homes, farms, garages, office buildings, gas stations, and vacant property; licensed real estate broker in the state of Michigan since 1920; qualified in court as an expert on the value of real estate; appraised for New York Life Insurance Company, Ann Arbor Trust Company, and Michigan Trust Company; four years' experience in building and construction; ten years' experience in residential sales.

ANDREW B. RANKIN, NEW YORK CITY. Born, Brooklyn, New York, June, 1889; associated with Title & Mortgage Liquidation Bureau, Insurance Department, State of New York; member of the Manhattan Chapter of the National Association of Real Estate Boards; professional territory covers the metropolitan area of New York, counties of Kings, Queens, Nassau, Suffolk, New York, Bronx, and Westchester; completed the course in appraising conducted by the New York Metropolitan District Chapter of the American Institute of Real Estate Appraisers at New York University, 1936-1937; entered the real estate profession in 1909; from 1912-1914 associated with the Bush Terminal Building Company; from 1914-1924, with Pierrepont Davenport, in general real estate, building, and mortgage business; thirteen years' experience in the appraising of real property, including bungalows, apartments, stores, markets, theatres, factories, and special purpose properties; qualified in court as an expert on the value of industrial and special property; appraised for National Title Guaranty Company, Title & Mortgage Bureau, Prudential Savings Bank, and Assistant Special Deputy Superintendent of Insurance, State of New York; experienced in building and construction; about fifteen years' residential sales experience.

C. A. MULLENIX, CLEVELAND, OHIO. Born, Springfield, Ohio, January, 1887; President of The Cuyahoga Estates Company; loan correspondent of The Berkshire Life Insurance Company; valuation commissioner of the Cleveland Real Estate Board; President of The Metropolitan Ohio Corporation; President of the National Association of Apartment House Owners; member of the Cleveland Real Estate Board; professional territory covers northeastern Ohio and western Pennsylvania; attended high school and college; thirteen years' experience in the appraising of real property, including homes, apartments, stores, office buildings, industrial property, and special purpose properties; licensed real estate broker in the state of Ohio for thirteen years; appraised for Phoenix Mutual Life Insur-

ance Company and Berkshire Life Insurance Company; eighteen years' building and construction experience; some residential sales experience.

JOSEPH J. GREENBERG, PHILADELPHIA, PENNSYLVANIA. Born, Baltimore, Maryland, September, 1883; member of the Philadelphia Real Estate Board; professional territory covers Philadelphia, Baltimore, and New York; lecturer; attended Baltimore City College, Baltimore, Maryland; thirty years' experience in appraising real property of all types; licensed real estate broker in the state of Pennsylvania; qualified in court as an expert on the value of real estate since 1907; appraised for Mutual Life Insurance Company, The Fidelity Mutual Life Insurance Company, Pennsylvania Company, Fidelity-Philadelphia Trust Company, the Philadelphia Saving Fund Society, Solidarity Building & Loan Association, Merchants & Manufacturers Building & Loan Association, and the William Penn Building & Loan Association; extensive building and construction experience.

JOHN G. KECK, PHILADELPHIA, PENNSYLVANIA. Born, Philadelphia, Pennsylvania, October, 1900; President of John G. Keck & Company; Secretary of Varsity Building & Loan Association; Treasurer of Victory Building & Loan Association; Real Estate Advisor to the Liquidating Trustees of the Kensington Security Bank & Trust Company; Real Estate Advisor to the Liquidating Trustees of the Girard Avenue Businessmen's Building & Loan Association; member of the Philadelphia Real Estate Board; professional territory covers eastern Pennsylvania and southern New Jersey; Temple University, 1918, real estate, commercial law, and financing; Temple University, 1935, course on appraising; case-study courses in real estate appraisal at Columbia University, offered by the American Institute of Real Estate Appraisers in June, 1937; twelve years' experience in the appraisal of real property, including homes, apartments, stores, industrial property, farms, and special purpose property; licensed real estate broker in the state of Pennsylvania, 1930 to date; qualified in court as an expert on the value of all types of real estate; extensive experience in building and construction; twenty-one years' experience in residential sales.

ROY R. CAPPE, PITTSBURGH, PENNSYLVANIA. Born, Bellevue, Pennsylvania, May, 1888; Real Estate Officer for the Fidelity Trust Company; President of the Hotel Corry Operating Company, Corry, Pennsylvania; member of the Board of Directors, White Swan Hotel, Uniontown, Pennsylvania; member of the Board of Directors, Penn-Lincoln Hotel, Wilkinsburg, Pennsylvania; active member of the Pittsburgh Real Estate Board; professional territory covers western Pennsylvania; author, lecturer, and teacher; member of the Appraisal Committee of the Pittsburgh Real Estate Board for eight years; twenty years' experience in appraising real property; supervised sales and appraisals of approximately thirty million dollars worth of real estate, embracing all types of appraising and analyses, including residential, mercantile, office, apartment, and hotel properties; qualified in court as an expert on the value of all types of real estate; ten years' experience in construction with M. C. Ryan Construction Company (company now out of existence); twenty years' experience in residential sales.

H. CHIDESTER, PITTSBURGH, PENNSYLVANIA. Born, Romney, West Virginia, May, 1880; engaged in general real estate and appraisal activities; appraiser for the Prudential Insurance Company of America in western Pennsylvania; third Vice President of the Pittsburgh Real Estate Board; Vice Chairman of the Appraisal Committee, Pittsburgh Real Estate Board; professional territory covers western Pennsylvania; fifteen years' experience in the appraisal of real property, including homes, apartments, stores, office buildings, and industrial property; licensed real estate broker in the state of Pennsylvania since 1930; qualified in court as an expert on the value of all types of real estate; thirty-two years' experience in residential sales.

JAMES WILLIAM COTTS, PITTSBURGH, PENNSYLVANIA. Born, Wheeling, West Virginia, May, 1899; Manager of the Mortgage Department, Peoples-Pittsburgh Trust Company; professional territory covers western Pennsylvania; twelve years' experience as real estate salesman and appraiser (two years with one firm and ten years with another real estate office before taking present position in 1931); experience in appraising all types of properties except mineral lands; licensed real estate broker in the state of Pennsylvania since 1921; qualified in court as an expert on value of commercial, industrial, and residential properties; appraised for the Pennsylvania Company for Assurance of Lives, the Union Trust Company, and the Peoples-Pittsburgh Trust Company.

FRED J. HETTLING, PITTSBURGH, PENNSYLVANIA. Born, Pittsburgh, Pennsylvania, May, 1886; Sales Manager for the Frank T. Lauinger Company; Treasurer of the Schenley Building & Loan Association; member and Treasurer of the Pittsburgh Real Estate Board; professional territory covers Greater Pittsburgh; eighteen years' experience in the appraisal of real property, including single-family homes, apartments, and commercial properties; licensed real estate broker in the state of Pennsylvania; qualified in court as an expert on the value of residential property; appraised for the Dollar Savings Bank and the State Capital Savings &

Loan Association; eighteen years' experience in residential sales.

CARL E. KOCH, PITTSBURGH, PENNSYLVANIA. Born, Pittsburgh, Pennsylvania, July, 1898; Senior Valuator for the Federal Housing Administration; Assistant Secretary of The Security Savings Fund and Loan Association of Pittsburgh, Pennsylvania; owns and operates a general real estate brokerage business; member of the Board of Governors, Pittsburgh Real Estate Board; professional territory covers western Pennsylvania; took special courses at the University of Pittsburgh in finance, law, accounting, real estate law, fundamentals, and appraising; took Real Estate Board course in appraising; attended Federal Housing Administration School; ten years' experience in appraising real property, including homes, apartments, stores, industrial property, and farms; licensed real estate broker since 1926; qualified in court as an expert on the value of residential, commercial, and industrial properties; appraised for West End Savings Bank & Trust Company, Ambridge Building & Loan Association, Security Saving Fund & Loan Association, and for Brackenridge Building & Loan Association; eleven years' experience in residential sales; four years' experience as timekeeper and cost clerk in building and construction work.

R. A. MACDOWELL, PITTSBURGH, PENNSYLVANIA. Born, Camden, South Carolina, August, 1890; Secretary-Treasurer of the Porter & MacDowell Company; director and a member of the Appraisal Committee of the Pittsburgh Real Estate Board; professional territory covers western Pennsylvania and northern West Virginia; B.A. degree, Furman University, Greenville, South Carolina; graduate work at Wofford College, Spartenburg, South Carolina; sixteen years' experience in the appraising of real property, including homes, apartments, stores, office buildings, industrial property, and special purpose properties; licensed real estate broker in the state of Pennsylvania; qualified in court as an expert on the value of residential, industrial, and commercial property; appraised for Pennsylvania Mutual, New York Life, and Standard Life Insurance Companies, Commonwealth Trust Company, Union Trust Company, and Fidelity Trust Company; fifteen years' residential sales experience.

WILLIAM MAISCH, PITTSBURGH, PENNSYLVANIA. Born, Pittsburgh, Pennsylvania, June, 1892; Assistant Manager of the Mortgage Department, Peoples-Pittsburgh Trust Company; active member of the Pittsburgh Real Estate Board; professional territory covers western Pennsylvania; author and lecturer; completed courses in real estate law, real estate appraising, and economics at the University of Pittsburgh; ten years' experience in the appraising of real property, including the valuation of homes, apartments, stores, office buildings, industrial property, farms, and numerous special purpose properties; in the Mortgage Department of the Peoples-Pittsburgh Trust Company for eighteen years; all of experience in appraisal work with the exception of a few private appraisals has been with this company.

J. F. MCCLURG, PITTSBURGH, PENNSYLVANIA. Born, Pittsburgh, Pennsylvania, January, 1890; Vice President of the Commonwealth Real Estate Company; member of the Pittsburgh Real Estate Board; professional territory covers western Pennsylvania; twenty-five years' experience in the appraising of real property; licensed real estate broker in the state of Pennsylvania; qualified in court as an expert on the value of all types of real property; appraised for savings, title, and trust companies in Pittsburgh and other eastern cities; some building and construction experience; thirty years' experience residential sales.

R. L. MCKALLIP, PITTSBURGH, PENNSYLVANIA. Born, Pittsburgh, Pennsylvania, July, 1884; partner of C. C. McKallip & Company; President and Director of the Chatham Land Company; President and Director of the Roberts Land Company; Assistant Treasurer and Director of the Smithfield & Sixth Avenue Land Company; member of the Pittsburgh Real Estate Board; professional territory covers Allegheny County, Pennsylvania; author and lecturer; twenty-five years' experience in the appraising of real property, including homes, apartments, stores, office buildings, industrial property, farms, and special purpose properties; licensed real estate broker in the state of Pennsylvania; qualified in court as an expert on the value of various types of property; appraised for The Equitable Life Assurance Society, Pan-American Life Insurance Company, Union Central Life Insurance Company, Bank of Pittsburgh, and the American State Bank and Trust Company; twenty-five years' experience in residential sales.

FRANK T. TROHAUGH, PITTSBURGH, PENNSYLVANIA. Born, Iselin, Pennsylvania, November, 1905; manager of the Renting & Sales Department, James P. Donovan; Secretary of the Greater Pittsburgh Exposition Society; active member and a member of the Board of Governors, Pittsburgh Real Estate Board; professional territory covers Allegheny County, Pennsylvania; also engaged in chain store and industrial leasing and selling in Beaver County, Washington County, Pennsylvania, and eastern Ohio and northern West Virginia; two years with C. C. McKallip & Company handling downtown and commercial properties; seven years with present employer; studied real estate funda-

mentals in local Y.M.C.A. courses; two years at Duquesne University, majoring in accounting, English, and economics; four years at the University of Pittsburgh, majoring in economics and English; completed two real estate courses at the University of Pittsburgh; was a student in the case-study courses in real estate appraisal, offered by the American Institute of Real Estate Appraisers at the University of Chicago in 1936; eight and one-half years' experience in appraising real property, including homes, apartments, stores, office buildings, industrial property, and special purpose property; licensed real estate broker in the state of Pennsylvania; qualified in court as an expert on the value of commercial property in 1937; appraised for the Union Trust Company of Pittsburgh, the Mellon National Bank, and the Philadelphia Savings Fund Society.

JAY E. ADAMS, SAN ANTONIO, TEXAS. Born, San Antonio, Texas, November, 1896; member of the San Antonio Real Estate Board; Chief Valuator of the Southwest Texas District Office of the Federal Housing Administration; Secretary-Treasurer of the Adams Investment Corporation; lecturer and author; University of Texas, 1914-1917, courses in the School of Business Administration; fourteen years' experience in the appraisal of real property, including the valuation of apartments, dwellings, garages, and stores; qualified in court as an expert on the value of residential property, 1934; appraised for Lincoln National Life Insurance Company and the Guardian Trust Company of San Antonio; experienced in residential sales.

C. RAY DAVIS, SAN ANTONIO, TEXAS. Born, Hopeville, Iowa, July, 1894; Sales Director for the Mortgage Loan & Agency Company; member of the San Antonio Real Estate Board; professional territory covers San Antonio and Bexar County, Texas; fifteen years' experience in the appraising of real property, including homes, apartments, and commercial property; qualified in court as an expert on the value of residential and business property; appraised for San Antonio Loan & Trust Company; fifteen years' residential sales experience.

A. R. FOSTER, SAN ANTONIO, TEXAS. Born, Cowichee, Washington, July, 1894; appraiser for Home Owners' Loan Corporation; member of the San Antonio Real Estate Board; professional territory covers all of southern Texas; nine years' experience in the appraising of real property, including homes, apartments, stores, office buildings, farms, and special purpose properties; qualified in court as an expert on the value of residential property; appraised for Texas Building & Loan Association and Colonial Building & Loan Association, of Ogden, Utah; experienced in building and construction; nine years' experience in residential sales.

HAROLD W. KELLER, SAN ANTONIO, TEXAS. Born, Beaver Dam, Wisconsin, April, 1895; General Manager of the Mortgage Loan & Agency Company; member of the San Antonio Real Estate Board; professional territory covers San Antonio and vicinity; graduate State Teachers College, Whitewater, Wisconsin; attended Graduate School of Business Administration, Harvard University; twelve years' experience in the appraising of real property, including homes, apartments, stores, industrial property, farms, and special purpose properties; qualified in court as an expert on the value of business property; appraised for Commercial Loan & Trust Company; experienced in building and construction; twelve years' experience in residential sales.

LLOYD M. BOYCE, MILWAUKEE, WISCONSIN. Born, Milwaukee, Wisconsin, March, 1894; employed by the First Wisconsin Mortgage Company and First Wisconsin Trust Company as Chief Appraiser and Manager of the Appraisal Department; also negotiates and consummates loan transactions; member of the Milwaukee Real Estate Board; professional territory covers Wisconsin—occasionally points outside in adjacent states; author and lecturer; graduate, University of Wisconsin, two-year agricultural course and four-year course department of economics; five years' appraisal experience in most states east of the Mississippi with The American Appraisal Company, of Milwaukee, and nine years' experience as Chief Appraiser for First Wisconsin Group, Milwaukee; fourteen years' experience in the appraisal of real property, including all types; licensed real estate salesman in the state of Wisconsin; qualified in court as an expert on the value of real property; appraised for the Metropolitan Life Insurance Company, Aetna Life Insurance Company, First Wisconsin National Bank and branches, and First Wisconsin Trust Company, also various building and loan societies.

ROBERT F. MARTY, MILWAUKEE, WISCONSIN. Born, New Glarus, Wisconsin, April, 1900; President of the Marty-Rogers Company; member of the Milwaukee Real Estate Board; professional territory covers Milwaukee County; lecturer; two years at the University of Wisconsin School of Commerce; six years as manager of the Bankers Building and the Empire Building, Milwaukee; two years as manager of the Riverside Theatre, Milwaukee; manager of the LaSalle Hotel, Milwaukee; at present in the property management business; instructor of property management classes for two years at the University of Wisconsin; nine years' experience in appraising real property, including homes, apartments, stores, office buildings, industrial property, and special purpose properties; licensed

real estate broker in the state of Wisconsin since 1933; qualified in court as an expert on the value of residential and commercial property; appraised for Hercules Life Insurance Company, Public Administrator of Milwaukee County, Wisconsin Tax Department, and R.F.C. Mortgage Company of Chicago; supervised the interior construction of the Bankers and the Empire Buildings in Milwaukee; five years' residential sales experience.

WILLIAM HENRY BOSLEY, TORONTO, CANADA. Born, Taunton, England, October, 1889; individual member of the National Association of Real Estate Boards; active member and Past President of the Toronto Real Estate Board; Fellow of the Incorporated Society of Auctioneers & Landed Property Agents, London, England; President of the Ontario Association of Real Estate Boards, 1928-1929-1930-1937; professional territory covers Ontario, Canada; retained in real estate matters by The Dominion Government; Provincial Government; Toronto City Council; Toronto Board of Education; Separate School Board; Ontario Hydro Commission; Consumers' Gas Company; Incorporated Synod of the Diocese of Toronto; Prudential Assurance Co., Ltd., London, England; Norwich Union Life Insurance Society, Norwich, England; Mutual Life Assurance Company of Canada; and others; active and extensive experience in the appraisal of real property.

ADMITTED TO ASSOCIATE MEMBER GRADE

EARL DONALD KEEFER, MIAMI BEACH, FLORIDA. Born, Alvo, Nebraska, December, 1890; Director, Secretary, and member of the Standing Appraisal Committee of the Miami Beach Realty Board; professional territory covers southeast Florida; three years at the University of California; six years in Europe, the last four years of which were spent as a member of the Unofficial American Delegation to the Reparation Commission; thirteen years as a licensed real estate broker in the city of Miami Beach, Florida, selling, leasing, and managing various types of property; liquidator of the Miami Beach Bank & Trust Company; completed case-study courses Appraisal I, II, and III offered by the American Institute of Real Estate Appraisers at the University of Chicago in 1936; seven years' experience in real estate appraising, including the valuation of single-family homes, apartment properties, hotels, office buildings, and garages.

ALBERT O. HORNER, PITTSBURGH, PENNSYLVANIA. Born, Mount Pleasant, Pennsylvania, August, 1879; partner, Horner & Daubenspeck; President and Director of the Home Mutual Building & Loan Association; Treasurer and Director of the North Hills Land & Improvement Company; member of the Pittsburgh Real Estate Board; professional territory covers Allegheny County, Pennsylvania; graduate, Juiata College, Huntington, Pennsylvania, 1899; graduate, Duff's Business College, Pittsburgh, 1900; Past President of the Allied Boards of Trade; member of the Planning Commission, City of Pittsburgh, more than eight years; Past President of the Allegheny County Building & Loan League; Director of the United States Building & Loan League, 1933 to 1935; twenty-five years' experience in the appraising of real property, including homes, apartments, stores, industrial property, and farms; licensed real estate broker in the state of Pennsylvania; qualified in court as an expert on the value of residential land and business property; appraised for the National Ben Franklin Insurance Company, Allegheny Trust Company, Colonial Trust Company, Home Mutual Building and Loan Association, Home Protective Building & Loan Association, and the Mutual Building & Loan of Freedom, also the Enterprise Building & Loan Association and Garfield Building & Loan Association; some building and construction experience; residential sales experience since 1900.

1938 Officers of American Institute of Real Estate Appraisers

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525 East Michigan Street, Milwaukee, Wisconsin

VICE PRESIDENTS

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45 Milk Street, Boston, Massachusetts

George L. Schmutz.....Southwest Region
8703 Santa Monica Boulevard, Los Angeles, Calif.

Ralph V. Field.....Great Lakes Region
203 Bank of Galesburg Bldg., Galesburg, Illinois

Maurice R. Massey.....Central Atlantic Region
S.E. Corner 13th and Green Streets,
Philadelphia, Pennsylvania

William A. Eastman.....Northwest Region
414 University Street, Seattle, Washington

R. W. Patton.....South Central Region
704 Travis Building, San Antonio, Texas

John B. Green.....Southeast Region
11 Fourth Street, North, St. Petersburg, Florida

Lewis C. Sholes.....North Central Region
U. S. National Bank Building, Omaha, Nebraska

Herbert U. Nelson.....Secretary
22 West Monroe Street, Chicago, Illinois

Mark Levy.....Treasurer
22 West Monroe Street, Chicago, Illinois

Harry Grant Atkinson.....Director of Activities
22 West Monroe Street, Chicago, Illinois

GOVERNING COUNCIL

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William A. Eastman, Seattle, Washington

Charles B. Shattuck, Los Angeles, California

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William W. Butts, St. Louis, Missouri

Term Expiring December 31, 1939

K. Lee Hyder, Milwaukee, Wisconsin

Frank McLaughlin, Toronto, Ontario

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John R. Hoyt, New York, New York

Morton G. Thalhimer, Richmond, Virginia

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John B. Green, St. Petersburg, Florida

Edward J. Maier, Newark, New Jersey

Warren L. Morris, Cleveland, Ohio

Term Expiring December 31, 1938

James W. Cree, Jr., Pittsburgh, Pennsylvania

J. Alvin Register, Jacksonville, Florida

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Ralph V. Field, Galesburg, Illinois

Newton C. Farr, Chicago, Illinois

George W. Drennan, Detroit, Michigan

Henry S. Miller, Dallas, Texas

Maurice R. Massey, Philadelphia, Pennsylvania

Frank M. McCurdy, Brooklyn, New York

Past Presidents on the Governing Council

Philip W. Kniskern, Philadelphia, Pennsylvania
(Term Expiring December 31, 1939)

Joseph B. Hall, Cleveland, Ohio
(Term Expiring December 31, 1940)

Harry E. Gilbert, Baltimore, Maryland
(Term Expiring December 31, 1940)

Maurice F. Reidy, Worcester, Massachusetts
(Term Expiring December 31, 1941)

E. L. Ostendorf, Cleveland, Ohio
(Term Expiring December 31, 1942)

Representing Board of Directors, N.A.R.E.B.

Joseph Laronge, Cleveland, Ohio

1938 Officers of Local Chapters

New Jersey Chapter Number 1

(The Annual Election of Officers of the Chapter will take place on January 17, 1938.)

Florida Chapter Number 2

President—Adrian McCune, Miami
Vice President—Walter D. Shelly, Jacksonville
Treasurer—Frank R. Jewett, Vero Beach
Secretary—J. C. Stewart, Orlando

Ohio Chapter Number 3

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Vice President—Albert J. Mayer, Cincinnati
Treasurer—John R. Schackne, Toledo
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New York Metropolitan District Chapter Number 4

President—George H. Gray, Brooklyn
Vice President—S. Edwin Kazdin, New York City
Vice President—Edward J. Crawford, New York City
Vice President—Stephen L. Angell, Scarsdale
Treasurer—Edward C. Heald, Yonkers
Secretary—Charles J. Pladwell, New York City

Southern California Chapter Number 5

President—T. F. Merrick, Long Beach
Vice President—Thomas Francis Mason, Wilmington
Secretary-Treasurer—A. G. Maspero, Long Beach

Illinois Chapter Number 6

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Second Vice President—Leonard C. Smith, East Chicago, Indiana
Treasurer—Dominick Dunn, Chicago
Secretary—Orlo Montague, Chicago
Director—Ernest H. Lyons, Chicago
Director—Graham Aldis, Chicago

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President—Charles T. Lincoln, New Haven, Conn.
Vice President—John C. Kiley, Boston, Mass.
Secretary-Treasurer—Robert S. Wayland, Boston, Mass.

Washington State Chapter Number 8

President—J. C. McQuigg, Seattle
Vice President—Charles P. Burnett, Seattle
Treasurer—Arthur E. Burr, Seattle
Secretary—Cecil VanVoris, Seattle

Philadelphia Chapter Number 9

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First Vice President—Boyd T. Barnard, Philadelphia
Second Vice President—Maurice R. Massey, Philadelphia
Treasurer—C. Harry Johnson, Philadelphia
Secretary—S. Craig Kane, Jr., Philadelphia

Michigan Chapter Number 10

President—Walter S. Palmer, Grand Rapids
Vice President—Edward G. Hacker, Lansing
Secretary-Treasurer—George C. Sexauer, Detroit

Northern California Chapter Number 11

President—James G. Stafford, Oakland
First Vice President—Edward C. Dee, San Francisco
Second Vice President—Mark Cheesman, Sacramento
Treasurer—W. B. Kyle, Oakland
Secretary—Edwin E. Lunstedt, San Francisco

St. Louis Chapter Number 12

President—William W. Butts, St. Louis
Vice President—Joseph W. Hannauer, St. Louis
Secretary-Treasurer—Curt C. Mack, St. Louis

Committees

Standing Committees

(See pages 96 to 101, Roster of Members, for addresses.)

ADMISSIONS COMMITTEE

Warren L. Morris, Cleveland, O., *Chairman*
Stanley Roe, Chicago, Ill., *Chairman, Subcommittee on Examinations*
George C. Sexauer, Detroit, Mich., *Chairman, Subcommittee on Reports*
Boyd T. Barnard, Philadelphia, Pa.
Henry B. Bunker, Cincinnati, O.
W. G. Burchfield, Houston, Tex.
George H. Coffin, Jr., Los Angeles, Calif.
Edward J. Crawford, New York, N. Y.
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C. F. Curry, Kansas City, Mo.
Hill Ferguson, Birmingham, Ala.
W. E. Ferguson, Baltimore, Md.
Victor J. Free, Cleveland, O.
Morris Goldfarb, Perth Amboy, N. J.
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